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# FUNDAMENTAL VOCAL TECHNIQUE

By

MAURICE CONKLIN, B. M.

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The material contained in this book is the result of my experience in teaching. The criticism of various theories is based on the problems and difficulties experienced by students who have come to me for assistance. The correct principles advocated in this book have never failed me in my singing, and those who practise them will find them a valuable help when correctly applied.

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# FOREWORD

The art of singing cannot be acquired from books. The services of a good instructor, who is also a singer, are indispensable because the value of correct demonstration cannot be overestimated. This book is not to take the place of a teacher but to act as a guide for those who are seeking knowledge based on natural principles. The student who is about to select an instructor should understand a few of the correct principles of singing, that he may guard against the danger of falling into the hands of incompetent teachers and charlatans.

Methods of instruction are so varied that the student is faced with a serious problem when making his selection of a vocal instructor. So numerous are the systems and the benefits to be derived from their acceptance that the student who is unacquainted with the correct principles of vocal instruction is often drawn into the meshes of an instructor whose work is destructive. He is confronted by many theories concerning the correct method of developing a foundation in vocal technique, and because of his lack of knowledge he is forced to accept some method until he has gained sufficient understanding to enable him to judge its efficacy.

Students seldom give consideration to that which should be accepted, and many fail to investigate the system of training that they are endeavoring to acquire until aware of a lack of progress or involved in serious vocal difficulties. Those who have discovered their misfortune of having wasted much valuable time in the study of some incorrect method may feel it a useless task to attempt its correction, but the experience should prove an awakening and aid them in the selection of a competent instructor.

The failure of many vocal methods is found in their lack of practical application to the student's problems. The many so-called discoveries relative to the development and control of the vocal organism fall by the wayside because they do not involve its normal functioning. Singing must be natural; and, if not, it ceases to be a pleasure and becomes a task.

Unnatural methods involve incorrect knowledge; progress can be made only when instruction is based on practical ideas. Instructors who cling to theories because of their suppositional tradition should discard these theories when they are proved worthless and should seek those which are productive of normal development. Elaborate systems, that have been devised for the creation of certain characteristics considered indispensable in the art of the singer, are so vague and so impractical in their application that the student himself realizes their worthlessness.

Methods of instruction, in general, involve too much analysis of the anatomical action of the vocal organism and not enough practical knowledge of singing. Instructors only too often fail to consider that the vocal organism is involuntary in its action; and through the attempt to establish a conscious control of its normal functioning, spontaneous freedom of action is lost.

Many systems of vocal instruction consist merely of physical manipulations to be imitated by the student, who, in turn, imparts them in like manner to those who study with him. It is not to be denied that knowledge gained in this manner often becomes so distorted that it lacks any practical application to the problems of the singer.

Mere speculation and experiment are not conducive to good singing and only engender loss of confidence in the ability to use the voice. The vocal organism is too often considered an instrument, and through this conception its training becomes mechanical. The normal training of the voice involves neither the conscious manipulation of the vocal organism nor any interference with the involuntary action of its various parts. Freedom of expression requires the cultivation of the voice through normal activity, and only as it is so developed can the singer hope to free his thought of physical limitation.

*Every singer develops his own technique.* The knowledge he receives from the instructor, if it is practical and acts as a solution of his problems, becomes a definite part of his work through the experience he gains in its application. The student should guard against the danger of imitation, because this imitation is destructive to the cultivation of individuality. It is not uncommon for younger singers to attempt to imitate the timbre, or quality, of other voices. This imitation results in a loss of the normal action of the vocal organism and also causes a distortion of the natural timbre. Many of the problems that are experienced by the student have their origin in the unconscious imitation of the teacher. Mannerisms and tone qualities of older singers are often admired by students who, striving to acquire them, destroy their own natural freedom of tone production and interpretation.

Since each voice possesses an individual timbre, the instructor should zealously guard against its destruction. He must never attempt to mold one voice after the pattern of another, nor advise the student to imitate the qualities in other voices because this is most destructive to his own natural timbre.

The physical characteristics of the singer are responsible for the timbre of his voice. The mental conception of the correct timbre or quality and the ability to hear it throughout the compass of the voice prove the most valuable items in the establishment of a definite foundation in vocal technique. Though the physical construction of one singer is similar to that of another, no two singers exhibit exactly the same quality of voice.

Because of the difference in face, head and body structures, all vocalists will not experience the same physical sensations. The development of the voice of one singer through the medium of sensations experienced by another can only result in failure. Vocal instruction based on physical sensation cannot be relied upon for stable results; it not only tends to destroy physical freedom but engenders serious vocal difficulties. Every singer will attain to a correct normal action of the vocal organism through the application of correct principles, but the sensations will not be identical with those experienced by another singer. The correct principles of vocal instruction are applicable to all voices, and it is the duty of the student so to assimilate the knowledge of these principles that he may see their normal application to his problems and may acquire a definite knowledge of the correct use of his voice.

The problems of the student are so varied that it is impossible to enumerate them in this book. The faults of one student may greatly resemble those of another, yet the manner in which the instructor applies his knowledge must be the result of his own diagnosis of the student's mental conception of his difficulties. The correction of faults that result from incorrect instruction is not discussed in detail in this book; the establishment of normal action eliminates them. No attempt has been made to present any counteraction of any unnatural functioning of the vocal organism, as this is not a natural process in the teaching of singing. Unnatural action of any kind is corrected by putting it out of the mind and acquiring that which is natural and productive of normal action.

*Not all who sing are efficient as teachers, yet every instructor should be a singer.* It is of the utmost value for the student to hear the correct demonstration of the instructor's principles, that he may see and hear their application to his problems. The instructor must prove the efficacy of his theories by his own singing and enable the student to obtain a right application of the principles in his own voice.

One frequently hears that the number of good singers is on the decline. This fact does not arise from the scarcity of good natural voices; but, due to the lack of correct instruction, these voices do not attain their rightful places. There is too much so-called scientific instruction, too many so-called new discoveries, and not sufficient normal training whereby the student may acquire a natural use of his voice in singing. *Many so-called scientific systems of instruction are products of instructors who have never sung.*

The voice is a vehicle of human expression. The production of tone is the result of the combined actions of the vocal organisms—the lungs, vocal cords, enunciating organs, and resonating cavities. So closely allied are the actions of these different parts that they must be treated as one unit; no one part must be singled out for intensive training.

Often elaborate systems of vocal gymnastics are invented for the conscious control of the action of the vocal organism and imposed upon the student as some traditional "method" of vocal technique. Many of these systems are called *Bel Canto* and are advertised as being *the* methods used by past generations of Italian vocal instructors. It would be well for the student to investigate the various methods of instruction before he accepts any course of study, because many of the unnatural physical manipulations that are used form a mask for incorrect methods and for lack of knowledge. The words *Bel Canto* do not signify any traditional method of voice development; they are merely Italian words, which, interpreted, mean "beautiful singing."

# I

# TECHNIQUE

The construction of a definite foundation in vocal technique involves the establishment of natural principles governing the correct use of the voice in singing. These principles enable the singer to acquire the normal functioning of the vocal organism. The acquisition of this normal functioning is the fundamental factor in obtaining the natural beauty of the voice.

Vocal instruction, consisting of the cultivation of various physical sensations through physical manipulation, cannot be relied upon for definite results. A careful examination of this method reveals a conscious effort to control muscular action, an effort which destroys artistic singing by sacrificing the spontaneous freedom of action in the vocal organism. Thought cannot be devoted to interpretative work when it is centered upon the functioning of the vocal organism; and the instant thought is directed to interpretative work, the vocal organism fails to function in the prescribed manner.

Few recognize that in speaking the action of the vocal organism is involuntary, and a careful examination will reveal that this action in singing is identical with that in speaking. Students often believe that the art of singing should be a highly complicated process, and if it is not so presented they are disappointed. They suppose that anatomical knowledge should predominate and that instruction should consist of various methods of manipulation and control of the vocal organism for tone production.

The singer who strives to sing mechanically never obtains that perfect vocal freedom which allows him the full utilization of his interpretative ability. When one speaks correctly, one is not conscious of the movements of the physical parts and their method of functioning. The same is true when one sings. If he is to free himself of vocal limitation, he must discard all attempts to control the action of the vocal organism.

Every instructor has worked with students who have a naturally correct functioning of the vocal organism in singing. These students, unaware of any physical action, produce tones of natural beauty with perfect ease. True, minor faults are found in the singing of these students, but they may be corrected without interfering with natural emission of tone.

The natural principles used in building a normal technique are not difficult to apply to the singer's problems. The normal action of the vocal organism is fundamentally the same in all voices, and the correction of vocal difficulties comes through the establishment of the natural functioning of this organism.

The natural timbre of the voice is that quality which establishes its individuality, and the singer's ability to hear this natural timbre through the normal action of the vocal organism in tone production is imperative. This ability forms the foundation of vocal technique; the instant the singer has acquired this important essential, he knows when he is employing correct tone production in his daily practise.

The action of the enunciating organs, the lips and the tongue, is most seriously affected by the focus of the tones, and it is important that the tones be directed to their natural exit, the lips. Spontaneous freedom of the enunciating organs is obtained, stiffness of the throat muscles is eliminated, only when the direction of the tones is toward the front of the mouth. The correct focus of a tone and the manner in which it is produced are primarily the results of the normal action of the enunciating organs in vowel formation and in consonant enunciation.

Tones should never be placed consciously in any part of the vocal anatomy; they should have their natural direction toward the front of the mouth. The natural flow of the tones to the place of emission, the lips, is strongly influenced by the mental conception of their point of focus; therefore, the student must acquire this natural direction in order that he may establish a definite technical foundation.

*A tone is either right or wrong.* If any obstruction prevents the tones from passing to the natural place of emission, the lips, normal action of the vocal organism will eliminate the obstruction and will result in the natural timbre of the voice. Resonance cannot be increased by focusing the tones into or toward any of the resonating mediums. Normal resonance is obtained only through the natural focus of the tones to their place of emission, the lips.

## II

## RESONANCE

Resonance of the voice is the natural amplification of the vibrations of the vocal cords. These vibrations are amplified by resounding in the chest cavity, the head cavities, and the bone structure of the facial masque. The correct blending of these vibrations, which is the natural timbre of the voice, is acquired only through the correct focus or direction of the tones.

The resonance of the voice cannot be consciously regulated or intensified by focusing the tones into, or toward, any of the several cavities without destroying the natural action of the vocal organism. To intensify the vibrations felt in any part of the vocal anatomy by using that part as a focusing point for the tones causes tension in some part or parts of the vocal organism, thereby destroying their normal action in tone production. Normal resonance can result only in the freedom from muscular tension; if there is tension in any one part, the natural blending of the various vibrations that produce the natural timbre of the voice is lost. To acquire this freedom from tension, it is imperative that the tones be directed to their natural place of emission, the lips.

The vibrations of the air in the head cavities and of the bone structure of the facial masque and head are generally considered the head resonance of the voice. The amplification of these vibrations forms the principle of many methods of vocal technique. In other methods this intensification is obtained by maintaining a set position of the lower jaw and producing the action for tone formation at the rear of the mouth. There are other methods of vocal technique equally unnatural.

The opening into the head cavities is just back of the soft palate and is called the naso-pharynx. (See Fig.

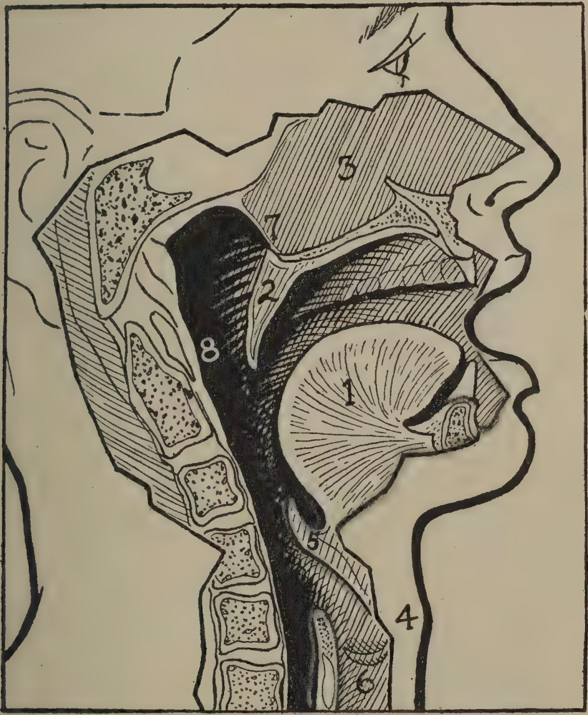


Fig. 1.—1. Tongue; 2. Uvula and Soft Palate; 3. Nasal Cavities or Passages; 4. Larynx; 5. Epiglottis; 6. Vocal Cords; 7. Naso-pharynx; 8. Pharynx.

1.) This opening is controlled or regulated by the action of the soft palate of which the uvula forms a part, and this action must be normal to acquire the natural amount of head resonance in tone formation. Failure of the soft palate to function naturally produces in tones either too much head vibration resulting in nasal quality or insufficient head vibration resulting in dullness and loss of normal resonance.

Focusing the tones into or toward the head cavities prevents normal action of the enunciating organs, the lips and the tongue. Failure of the lips to function naturally in tone formation prevents the normal action of the soft palate, since the natural action of the lips is responsible for most of the roundness of tone quality in vowel formation; and if they fail to act or if their action is weak, the soft palate will attempt to compensate for this loss. Also, the action of the lips has a vital effect upon the action of the tongue in its adjustment of the mouth cavity in vowel formation. The natural opening at the rear of the mouth cavity is necessary for the blending of the vibrations of the various resonating mediums and depends upon the flexibility of the tongue. The flexibility of the tongue is dependent upon the freedom of the lower jaw, and this freedom of the lower jaw is largely the result of the normal action of the lips in enunciation.

The pharynx forms the connecting passage between the larynx and the mouth and head cavities. (See Fig. 1. Page 17.) At the lower end of this passage is the larynx; at the top are the openings into the mouth and head cavities. The natural function of the pharynx in tone production is primarily to amplify the vibrations of the vocal cords. The action of the tongue effects the opening of the pharynx; the rising of the tongue, when head placement or focus of tones is used, partially closes the opening from the pharynx into the mouth cavity, and the crowded condition at the rear of the mouth cavity prevents the pharynx from opening normally in tone production.

The acquiring of the natural timbre of the voice depends largely upon the normal action of the tongue in its adjustment of the mouth cavity for vowel formation. The natural fullness and roundness of tones results from the natural blending of the resonance of the mouth cavity with that of the other resonating mediums. Each vowel, to obtain its natural amount of mouth resonance, requires its own individual formation of the mouth cavity, a formation which can result only from the normal spontaneous action of the tongue.

The resonance of the voice is attained through normal vowel formation. The fine adjustment of the enunciating organs for the formation of each vowel can never be performed if the singer consciously manipulates their action. The manipulation of the enunciating organs for the formation of any vowel prior to the attack prevents the natural adjustments of the mouth cavity and not only results in the distortion of the vowels but causes a loss of normal resonance. The mental conception of the natural sound of any vowel is all that is necessary to furnish the impetus for the normal action of the enunciating organs.

The intensity of vibration experienced in the various resonating mediums of the vocal organism varies with the several vowel formations. The attempt to produce in one vowel the same vibratory sensation experienced in another results in vowel distortion, because each vowel requires its own individual formation, and its vibratory intensity will differ accordingly. The intensity of vibrations in each resonating medium is regulated naturally by the normal action of the enunciating organs in vowel formation. The vibrations cannot be intensified by any physical manipulations of the vocal organism.

Focusing the tones into or toward the head cavities to intensify the vibrations in these cavities often results in the habit of sharping. The singer may hear the correct pitch, but the intense nasal vibration and the tension of the muscles of the throat and larynx cause the tones to rise in pitch.

The loss of the normal vibration in the resonating mediums will cause the tones to sound under pitch. A tone may often sound on pitch when close to the singer, but the lack of natural resonance dulls the natural brilliant quality or resonance which permits the voice to carry, and the tones seem to sag from the key when heard at a distance.

Some instructors advise the protruding of the upper lip to create a resonating space between the lip and the upper teeth. The "sticking out" of the upper lip indirectly prevents the natural action of the soft palate in its normal adjustments of the opening into the head cavities. The nasal quality of tone that invariably results is accepted as resonance. Normal lip action in the formation of vowels is lost as is the natural rounding action of the mouth necessary in the vowels *o, oo,* and the sound *ah*. The natural tendency of the soft palate is to compensate for the loss of normal lip action in the formation of these vowels, and thereby normal resonance is diminished.

Many singers fail to consider that the action of the soft palate is involuntary. They strive to control its action in tone production, to arch the soft palate by consciously attempting to raise the uvula. The soft palate will arch itself normally when tone production is natural; and the uvula, which forms the elastic part of the soft palate, flattens out when tones are sung in the upper part of the compass. The rising of the soft palate with the ascending tones is a natural function when tone production is normal; and if the attempt is made to control or regulate its action, there is a loss of the normal adjustment of the opening into the head cavities.

Resonance cannot be consciously regulated nor intensified by physical manipulation. The tones of the entire compass must have the natural timbre of the voice, and the natural timbre can be acquired only by the natural direction of the tones toward their natural exit, the lips. Resonance can result only from the normal action of the vocal organism and the natural functioning of the various resonating mediums.

## REGISTERS

Many conflicting theories have been advanced regarding the subject of registers; and although the general trend of thought is to discard it, there are many who still adhere to this method of teaching and consider it the fundamental basis for the development of voice resonance. Many instructors disclaim the use of registers, yet their methods of vocalization produce these very changes of tone quality through their misconception of the natural focus of the tones.

The theory of registers is derived from the belief that the resonance of the voice can be amplified by means of intensification of the vibrations experienced in the various parts of the vocal organism by using these parts as focusing points for the tones. Some instructors say the compass of the voice should be divided into two registers, head and chest; others maintain there are three, chest, medium—which is often called mixed tone register—,and head. The vibrations felt in the chest while singing the low tones indicate chest resonance. The vibrations felt in the head cavities and the bone structure of the facial masque indicate head resonance. The medium tones, or middle tones of the compass, are often called mixed tones because they are thought to have no definite resonating cavity but are amplified by a mixing of the vibrations of the chest and head cavities.

There are systems of vocal technique based on the theory that the vocal organism is a tube; that the resonance of the voice is governed by the shortening or lengthening of this tube by the larynx. The tube is shortened when singing the upper tones of the voice and lengthened for the lower tones. A close examination reveals a conscious attempt to raise and to lower the larynx; throat stiffness can be the only result. The fallacies of this theory are that the vocal organism is not a tube, that the movements of the larynx do not affect the resonance of the voice, and that the movements of the larynx are involuntary. Attempting to control the movements of the larynx produces lower tones not unlike so-called "chest tones," whose quality is heavy and gutteral, and higher tones similar to so-called "head tones," whose quality is thin and strident. Concentrating the attention upon laryngeal movements contracts the throat and compels the singer to resort to a conscious spreading of the mouth to prevent the collapse or closing of the throat while sustaining a tone. There is a decided change of quality between the tones of the lower and the upper parts of the voice, although these changes are not as abrupt as they are when using registers in which the larynx is allowed even less freedom to function. The singer never acquires the full compass of the voice, because the natural action of the larynx is lost. Vowels are always distorted, and the singer never hears the natural timbre of the voice. Enunciation is difficult because of the unnatural direction of the tones; there is a loss of the normal action of the enunciating organs. The tones in the upper part of the compass acquire a strident quality and are as devoid of any musical value as a yell.

Many of the theories for amplifying the resonance of the voice are based upon the method of amplifying sound in musical instruments. This method is not applicable to the human voice, because the vocal organism has numerous resonating mediums while a mechanical instrument generally has but one. The one resonating medium or sounding board of an instrument must function for the amplification of all its tones, while the voice obtains its resonance from a blending of the vibrations of the various resonating parts of the vocal organism.

Since the blending of these vibrations can be accomplished only by cultivation of the natural direction of tones, the vocal organism must function normally. Failure to accept this fact can only result in confusion of thought and the incorrect use of the voice in singing.

## The Chest Register

Because singers are conscious of the vibrations in the chest cavity when singing or speaking on a low pitch of tone, many attempt to amplify these vibrations by means of so-called "chest tones." Low tones are produced by slow vibrations and are always amplified by the largest resonator. The low tones of the voice are produced by the slow vibrations of the vocal cords; and the chest being the largest cavity of the vocal organism, its vibrations are more prominent in the lower tones of the voice.

The vibrations felt in the chest cavity are sympathetic vibrations; they cannot be intensified by unnatural manipulations of the vocal organism. The effort to open the throat and to lower the larynx results in a raucous, hollow, or gutteral sound which is called *chest tone.* The conscious physical action used to produce this chest quality not only causes a loss of the flexibility of the voice but results in the destruction of the natural timbre. Careful attention to the tones produced in this manner reveals that they are merely a throaty production of sound.

Bringing the vocal cords into closer proximity with the chest cavity is often believed to amplify chest vibrations. The larynx is forced down by lowering the back of the tongue, and the heavy gutteral quality produced by the unnatural opening of the throat is accepted as the legitimate timbre of the low tones of the compass. This method of tone production produces a more raucous quality in the female than in the male voice. Contraltos who exaggerate this tone often acquire a bass quality of voice that is utterly unmusical. The hollowness or heaviness of this quality in the lower part of the compass accentuates the thinness of the upper tones which often lack the normal fullness of a soprano voice.

This unnatural throaty production of tone, which comes from the use of chest register, can be used only for a limited number of tones in the lower part of the compass. The inability to carry this throaty quality into the upper tones, and the "break" or "change" evident between the so-called "chest" and "middle" registers, should be ample proof that this throaty quality is not the natural timbre of the voice. The "break" or "change" of tone quality that is heard is the result not of the change from one resonating cavity to another, but of the inability of the larynx to function for higher tones.

Lowering the rear of the tongue to adjust the larynx for the production of chest tones causes a loss of the natural action of the tongue in enunciation. Vowels are distorted, and consonants requiring the action of the tongue lack the strength necessary for clean enunciation of words.

The laryngeal tension, caused by the production of chest tones, prevents the normal adjustments of the larynx for the natural separation of the tones in florid singing. Singers usually resort to a conscious separation of the tones by using a slow tempo. When the tempo is accelerated the tones become slurred, and there is a sensation of lifting weight. The ascending tones become dull and smothered in quality; and when the singer reaches the so-called "break" or "change," he must resort to a conscious physical manipulation of the throat muscles to sing up into the middle tones of the compass. Basses often acquire the habit of singing the lower tones with a throaty production of tone and so are unable to sing florid passages. They merely accent the first note of each group by unnaturally jarring or jerking the tone and accept the blurred condition of the intervening tones. Basses who have acquired this method of singing invariably produce a "hooty" quality in the upper tones; they are unable to enunciate words in the upper part of the compass.

The laryngeal tension caused by singing "chest tones" results in throat fatigue. The effort to carry this "chest quality" or "throaty quality" into the middle tones of the compass often results in forcing; the strain irritates the vocal cords, and tones become husky.

## The Medium Register

The medium or middle tones of the compass are often called mixed tones because their resonance is believed to be a mixture of both head and chest vibrations. Some instructors have even named this part of the compass "false voice"; because, they claim it has no definite resonating cavity.

"Chest quality" is produced by a conscious manipulation of the laryngeal muscles to hold the larynx in a low position. "Head voice" or "head quality or resonance" is the result of focusing the tones into or toward the head cavities. That the mind furnish the impetus for two opposite physical manipulations of the vocal organism at the same time is impossible. The impossibility of mixing these qualities of voice by attempted co-ordination of physical actions or manipulations is evident and has caused many students to doubt the rationality of vocal instruction.

Sopranos or contraltos who use this method of singing always find the "middle register" or middle part of the voice weak and lacking in tone vitality. The loss of power in these middle tones results largely from releasing the tension of the laryngeal muscles, a tension which was used for the production of chest tones. This sudden loss of tonality of the throat muscles produces a diminution of vitality in the middle tones, which become dull and lacking in resonance. The relaxation, necessary to release the larynx that the middle tones may be sung, weakens the consonants and hinders clean enunciation. This loss of clean enunciation has a twofold result. First, *breathy tone quality,* which prevents sustaining tones in this part of the compass. Second, loss of volume, which leads to the habit of forcing, and, combined with the distorted action of the vocal organism, results in a short career.

The loss of normal resonance, combined with the unnatural relaxing of the laryngeal muscles, causes the tones in this part of the compass to sag from pitch. When these tones are forced, as they often are because of their lack of volume, they become thin and sound above the pitch. Contraltos often develop a peculiar open sound in this part of the compass which resembles a throaty kind of yell. Singers of "blue songs" acquire this tone; when singing above the chest register, they are forced to use this open sound in order to sing the middle tones of the compass. The constant use of this tone quality results in an early loss of the voice, and the constant strain of the throat muscles causes serious throat trouble.

## The Head Register

When the upper tones of the compass are directed toward the head cavities they are called the head register, head voice, or head tone. The resonance and brilliance of these tones are believed to be the result of intensifying the vibrations of the bone structure of the facial masque and head and of the air in the various cavities of the head.

Instructors who employ head focus of tones vary in their opinion as to the parts toward which tones should be directed. Those parts most commonly designated as focusing points are the middle of the forehead just above the bridge of the nose, the bone structure of the facial masque, the bone structure of the upper part of the head, and the nasal cavities or nasal passages.

It is true that the upper cavities and the bone structure of the facial masque and head furnish their share of the resonance of the voice, but the vibrations of these resonating mediums are sympathetic vibrations and cannot be consciously intensified.

Focusing the tones toward the upper cavities can be accomplished only by directing the tones toward the opening, just back of the soft palate, into the head cavities. This opening is controlled or regulated by the action of the soft palate of which the uvula forms a part.

Directing the tones toward the head cavities causes the tones to be drawn away from their natural exit, the lips. The lips fail to perform their natural action in vowel formation, and the soft palate is forced to compensate for the loss. Tension is produced in the soft palate, and it cannot function normally for the adjustment of the opening into the head cavities; there results either too much nasal vibration—when the tone has a nasal twang—or too little vibration—when the tones sound dull and under pitch.

Directing the tones into the head cavities causes the tongue to rise at the rear of the mouth cavity that it may act as a barrier to prevent the tones from passing into the mouth cavity. This unnatural rising of the tongue destroys the natural formation of the mouth cavity in vowel formation, and vowels are distorted. Drawing up the rear of the tongue raises the larynx so that it cannot adjust itself for normal tone production. The tension produced in the laryngeal muscles prevents the adjustment of the larynx for the lower tones, and the singer finds difficulty in descending from a high to a lower tone.

Singers using head focus of tones have difficulty in singing the vowels *o* as in hope and *a* as in fate. The high position of the tongue combined with the inaction of the lips causes the vowel *o* to sound much like the sound *ah*. The tension in the rear of the tongue prevents its normal action in adjusting the mouth cavity for the vowel *a*, which becomes distorted and dull or flat in quality.

The loss of the normal action of the lips and tongue prevents normal enunciation of words. The tension in the soft palate and in the rear of the tongue results in throat fatigue and eventually produces deterioration of the voice. Also, the loss of the normal opening at the rear of the mouth cavity results in the loss of the upper tones of the voice. This closing of the rear of the mouth cavity often becomes so complete that the high tones stop or "break."

The partial closing of the rear of the mouth cavity causes the high tones to lack fullness and mellow quality. This partial closing of the rear of the mouth cavity prevents the normal formation of the vowels. The breath that is used in singing does not have the freedom of exit as it does in normal tone formation, and the crowding of the breath in the throat causes irritation of the vocal cords and results in huskiness. This irritated condition of the vocal cords often develops nodes.

Head focus of tones may cause such intense nasal vibration that the pitch of the tones is raised. The tension of the laryngeal muscles caused by the unnatural raising of the rear of the tongue also results in the habit of sharping.

Loss of natural adjustment of the opening into the head cavities is often the cause of the dull, thick quality which many call *covered tone*. The spreading of the lips as in smiling is generally used as an attempt to eliminate this quality, and throat stiffness results. The spreading of the lips causes a loss of their own natural action and of that of the lower jaw in the enunciation of words. Loss of the normal action of the lower jaw prevents the natural action of the tongue in its adjustments of the mouth cavity for vowel formation.

Head placement often results in a "cupped in" or "hooty" quality in the upper tones, and the tension at the rear of the mouth cavity causes difficulty in the enunciation of words. The weak action of consonants prevents the normal opening of the vowels, and words are often unintelligible.

## III

## BREATHING

Singing, being of a more sustained character than speaking, places a greater demand upon the breath supply. To meet this demand, a normal support of the breath must be acquired through correct breathing and a natural development of the breathing muscles. Singing requires not a conscious control of the breathing muscles but a simple development of their normal activity to obtain a natural sustained pressure devoid of any muscular tension.

Breath support is the natural pressure produced by the action of the breathing muscles in expelling the air from the lungs. This pressure is the result of the upward rising of the diaphragm combined with the contracting action of the muscles of the chest and the abdomen. Regulation of this pressure in the formation of tones is impossible, because the action of the breathing muscles is largely involuntary and cannot be consciously controlled by the singer.

The terms *breath control* and *breath support* are often confusing; they allude to conscious physical manipulation of the breathing muscles. Methods of breath support are so varied and the results obtained through their use are often so vague that their value is questionable in the art of singing. "Tying the tone to the breath," and "supporting the tone with the breath" are two of the terms used in the teaching of singing. When one understands that the breath produces the vibrations which are designated *tone,* one sees that these terms are meaningless.

The term "tying the tone to the breath" erroneously indicates that the tone is a separate thing to be attached to the breath; instead, tone is the very result of the pressure of this breath upon the vocal cords. Vocal sound or tone can never be detached from the element that produces it, because the tone is the result of a mental conception of a sound, and this sound is produced by the vibration of the vocal cords set in motion by the breath.

The singer who thinks of "resting the tone upon the breath" finds that the tones lose their natural flow to the front of the mouth, and he feels that they are being pressed or held down upon the breath. The crowded sensation that many experience in the throat from this conception causes tension in the laryngeal muscles, and the voice loses much of its brilliance and flexibility. This tension of the laryngeal muscles extends to the muscles of the lower jaw and causes a loss of its freedom of action in enunciation.

"Supporting the tone with the breath" often leads to forcing. To think of the breath as being lifted or forced up under the tone causes abnormal pressure upon the larynx and often results in singing off key. The tension of the laryngeal muscles prevents the flexible adjustment of the larynx for the individual notes of a florid passage, and a clear definition of the notes is difficult to obtain. The lifting of the breath often causes a crowding of the breath into the upper part of the chest when singing ascending scales and intervals of an octave; the singer then becomes conscious of a sensation of lifting weight or a feeling of heaviness when singing the upper tones. This abnormal pressure of the breath prevents the normal adjustment of the larynx when singing the descending tones of a scale or interval, or results in a complete inability to sing the lower tone if it be in the lower extreme of the compass.

Rarely do students of singing realize the importance of acquiring good breath support through correct breathing. Often they fail to see that many forms of breath control used in the teaching of singing are either (1) an attempt to compensate for the lack of normal development of the breathing muscles or (2) an effort to control the loss of breath through incorrect tone production. The action of the breathing muscles may be consciously controlled; but, owing to their action being involuntary, these muscles revert to their natural functioning the instant thought is directed to other details in singing.

To control the muscular action in breathing often proves a source of fatigue to the muscles of the vocal organism and of the body. To control the amount of breath being used prevents sufficient breath supply for normal tone production and results in constriction and inevitable fatigue of the laryngeal muscles. Regulating the flow of breath to the larynx fatigues the breathing muscles by preventing the normal contraction of the breathing muscles in expelling the air from the lungs. This fatigue has a two-fold result. First, the breathing muscles relax and cause a loss of support in singing the tones in the upper part of the compass. Second, the breathing muscles become so completely exhausted that they fail to regulate the flow of the breath. The entire breath content is now forced into the larynx, and a tension is produced in the vocal cords by their effort to prevent the loss of the breath and at the same time to convert it into tone. Not only is the natural timbre of the voice destroyed, but the habit of singing off key is formed.

When any tone or sound is conceived in thought, the correct amount of breath pressure for this tone or sound is at once established without any conscious physical effort on the part of the singer. Only nature can establish the correct amount of breath pressure required for the formation of a tone, and any attempt to control or to regulate this pressure destroys the perfect physical adjustments which unconsciously take place. Since each tone places an individual demand upon the breath supply, it is impossible to estimate the amount of breath pressure required for the formation of any particular tone.

Singers often experience difficulty in singing long florid passages, such as those in the arias of Handel's oratorios, because they lack sufficient breath supply. The vowel forming the open sound of the word upon which a florid passage is sung should never be distorted by anticipation of the final consonant. The vowel sound will always retain its pure quality throughout the passage if it is mentally enunciated anew upon accented notes; then the final consonants are quickly enunciated at the close of the passage. This mental enunciation not only maintains a clear vowel throughout the passage but also eliminates any tension in the enunciating organs and proves most valuable in the singing of a florid passage which includes tones in both the upper and lower parts of the compass. It allows the vocal organism instantly to adjust itself for the differences in pitch of the tones and prevents distortion of the vowel. Anticipation of the final consonant distorts the vowel and produces a breathy quality of tone, which, upon careful examination, reveals the escape of unused breath. The purity of the naturally formed vowel conserves the breath and enhances the quality of the tone and the flexibility of the voice.

Correct attack of a tone is the instant formation of the vowel at the moment the tone is sounded. The conscious drawing of the mouth into a formation for a vowel or word before the attack of the tone causes the escape of small amounts of breath, thereby producing a most disagreeable *breathy tone quality*. This quality, caused by the loss of a portion of the breath supply, prevents the singing of sustained tones and of long florid passages.

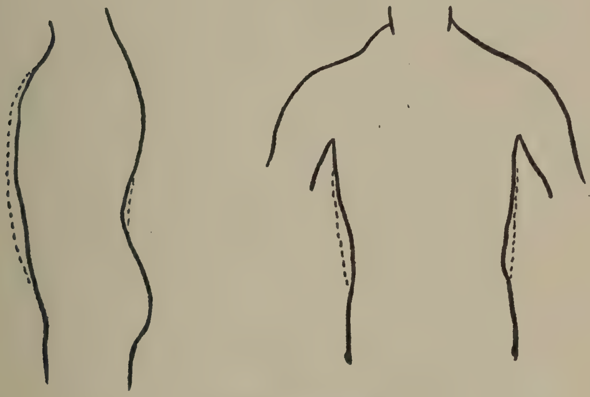
Sliding or scooping to a tone prevents the instant formation of the vowel and the direct enunciation of the consonant and allows a portion of the breath to escape unused. This indirect enunciation of vowels and consonants often may be traced to the effort to sing legato. To produce an uninterrupted flow of tone, by slurring one word into another, weakens the impetus of the consonants to open the vowels directly. Consonants open and close the vowels in singing and speaking words; one should cultivate their direct enunciation.

When consonants are not enunciated directly, small portions of the breath escape unused. Words commencing with the letters *d, h, r, s, t, w, z,* are likely to be preceded by a slight hissing sound caused by an escape of unused breath. The lack of correct breath control is often held responsible for this difficulty, and an endeavor is made to control this loss through the manipulation of the breathing muscles. This is a mistake. The difficulty rests in consonant enunciation, not in breath control.

Weak enunciation of consonants often causes forcing. The loss of breath through poor enunciation places excessive demands upon the breathing muscles and results in physical fatigue. Direct enunciation of consonants prevents the loss of the breath supply and enables the vowel that follows to assume its natural formation at the instant of attack. A careful study of the natural vowel sounds and the cultivation of clean consonant enunciation eliminate *breathy tone quality.*

The diaphragm, the chief muscle of respiration, forms the dividing line between the thorax and abdominal cavities. It is domelike in relaxation (for exhalation) and nearly flat in contraction (for inhalation).

The correct inhalation for singing is a combination of chest and abdominal action. The descending of the diaphragm and the expansion of the chest cavity cause a negative pressure in the thorax, and the air rushes in and fills the lungs. Normal inhalation quickly and easily fills the lungs without effort. The exertion to fill the lungs beyond their normal capacity causes fatigue of the vocal organism and of the body. When an excess strain is put upon the breathing muscles in inhalation, there is an instant reaction to exhale the entire air content. The excess pressure caused by this forced exhalation results in tension of the laryngeal muscles and often causes a deviation from pitch and a hard metallic quality.



Normal Breathing

The habit of sitting at the piano for the major amount of practice is detrimental to the development of good breath support. Normal inhalation is impossible when the arms are extended to play an accompaniment—the chest cannot expand normally—, and a distorted form of breathing becomes a habit. Then when the singer stands, the breath fails to give sufficient support; and the singer experiences difficulty when singing the higher tones.

The muscles of the back exert an important control upon the action of the breathing muscles. A correct standing position maintains a firm, flexible action of the diaphragm in exhalation and is a definite aid in the prevention of forcing. The habit of standing incorrectly during periods of practice is often the cause of insufficient breath support before the public. The effort to stand correctly and the struggle to appear at ease rob one of physical freedom, and the tension of the body muscles prevents normal inhalation. Poise is best accomplished by a graceful carriage of the body not only upon the platform but in daily activities. The singer should stand during his daily practice, for correct posture of the body is important in the development both of poise and of correct breath support.

The singer should not stand with the heels together. An unsteadiness of the body results, and the slight swaying sensation that is felt is detrimental to good breath support. The feeling of tension in the abdominal muscles when the body leans backward prevents the normal action of these muscles in inhalation and exhalation, because abnormal contraction of the abdomen prevents the natural rising of the diaphragm for exhalation. The singer is compelled to employ a conscious lifting, or even forcing, of the breath for production of the upper tones. When the body leans slightly forward, the tension is felt in the abdominal muscles of the lower lumbar region (small back) and reflects on the action of the part of the diaphragm which originates at the lumbar vertebrae. Unsteadiness of the body lets the chest and abdominal muscles experience a general tension which causes physical uneasiness and even fatigue.

Singers often assume the standing position with the feet together, the weight of the body resting entirely on one foot. This position produces relaxation or lack of tonality, or firmness, in the abdominal muscles. The abdomen protrudes and the chest fails to expand, normal inhalation and exhalation are lost, and the performer sings under pitch. When the breathing muscles fail to perform their normal action for exhalation, the singer resorts to a conscious contraction of the abdomen to lift the breath to the larynx for support of the tones. The sudden rising of the diaphragm by the conscious contraction of the abdomen produces an abnormal air pressure upon the larynx and forces the upper tones.

# IV

# CHEST BREATHING

In chest breathing there is a forced expansion of the chest combined with a contraction of the abdomen for inhalation. Many views have been advanced regarding the benefits to be derived from this method of breath support; principal among them is that through the concentration of the breath in the upper part of the lungs, the singer maintains a strong breath pressure to the larynx for tone production. It is also believed that the forceful expansion of the chest combined with the contraction of the abdomen increases the air capacity of the lungs.

Chest breathing is commonly used by instructors who employ head focus for tones. The mental conception that the tones are focused toward the head cavities invariably causes a sense of reaching or lifting, and the breathing muscles instantly function to produce the necessary breath support. The sensation of reaching up for something always causes a lifting and expanding of the chest as well as a contraction of the abdomen. Because many singers using head focus have experienced this action of the breathing muscles, they have accepted this form of breathing as a legitimate breath support for singing.

The normal contraction of the abdominal muscles and the rising of the diaphragm (the chief muscle of respiration) form the major action for expelling the air from the lungs, and this normal functioning is lost through a forced lifting and expanding of the chest. There must be a normal action of the breathing muscles for inhalation before they can perform their normal action for exhalation; the expansion of both the chest and the abdomen must be normal before there can be a complete natural action of the breathing muscles for exhalation.

The lungs are cone-shaped with the bases in close proximity to the diaphragm. Since a forced contraction of the abdomen prevents the natural descending of the diaphragm, a considerable amount of the normal air capacity of the lungs is lost. The abnormal use of the breathing muscles causes fatigue and weakens these muscles. Whereas, on the contrary, if the breathing muscles are properly used, they tend to produce a reserve of power or resistance.

Chest Breathing

Failure to obtain the normal air capacity of the lungs and the inability to use the major portion of air that has been inhaled cause forcing when singing the upper tones of the compass. The abnormal pressure produced upon the larynx when the air is first inhaled is soon spent, and conscious physical effort must be employed to sing the remaining notes of a phrase; in the upper tones this results in a shrill strident quality which is apt to cause them to sound above the key.

Singers who use chest breathing have difficulty in singing the lower tones. Because of the unnatural pressure upon the larynx, the vocal cords are unable to produce the slow vibrations for the lower tones. The tension of the laryngeal muscles prevents minute adjustments in the anatomical position of the larynx; the excessive air pressure may lift or lower its position during tone production. This tension causes contraction of the vocal cords, and this contraction often becomes so acute that it completely closes the opening between them, and the tones stop or "break."

Abnormal pressure of the breath prevents natural adjustments of the larynx for the individual notes of a florid passage. Tension in the laryngeal muscles results in an unnatural acceleration of tempo. Tones become slurred, and the singer resorts to a conscious manipulation of the vocal organism to obtain a clear definition of the notes. Scales become uneven and are difficult to sing at any designated tempo. The tension of the laryngeal muscles is detrimental to the development of the trill because it prevents the even alternation of the notes; the interval between the two notes is lost, and the trill becomes an obnoxious tremolo.

Tension of the laryngeal muscles produces fatigue, and there results a state of atony, abnormal relaxation. Unless this tension is corrected, unsteadiness of tone arises and causes a disagreeable tremolo.

The tongue is attached at its base to the hyoid bone to which the larynx also is attached. Tension in the laryngeal muscles diminishes the flexibility of the tongue in tone formation. Abnormal pressure of the breath often forces the larynx upward, raising the base of the tongue and decreasing the natural opening of the mouth cavity. Normal resonance is lost. The unnatural adjustment of the mouth cavity hinders the blending of the vibrations of the various resonating mediums, and natural timbre is lost.

Tension in the laryngeal muscles destroys the flexibility of the tongue. The tongue adjusts the mouth cavity for the formation of the different vowels and acts for the enunciation of consonants. When the flexibility of the tongue is lost, vowels are distorted and consonants become weak and lack the impetus necessary for clean enunciation. Difficulty is experienced in those songs requiring a rapid enunciation of words because of the loss of flexibility of the tongue, and many of the words become unintelligible.

The abnormal pressure of the breath upon the vocal cords fatigues them; the membranes composing the surface of the cords become irritated, and mucus collects upon their surfaces. Huskiness and veiled quality of tone result.

# V

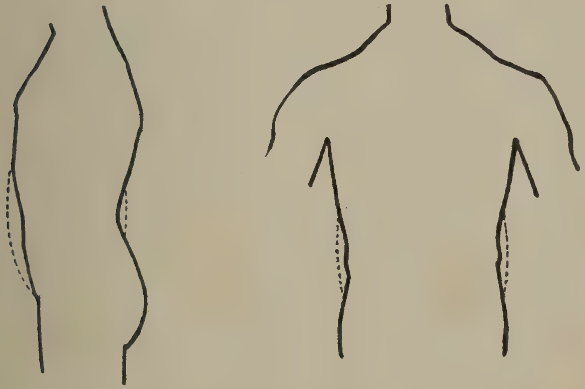
# FORCED ABDOMINAL BREATHING

Forced abdominal breathing means forced expansion of the abdomen; this is called abdominal support. This method of breathing, it is sometimes claimed, enables the singer definitely to control the action of the diaphragm in tone production. The tension produced in the abdominal muscles through this forced expansion prevents the normal rising action of the diaphragm in exhalation, thus retarding the flow of the breath. This so-called regulation of the breath is erroneously believed necessary to prevent any excess pressure upon the vocal cords.

The forced expansion of the abdomen causes tension of the abdominal muscles and prevents their normal action in exhalation. Normal breath pressure can be acquired only by the firm, flexible action of the abdominal muscles, when the diaphragm is allowed to perform its function naturally in exhalation. The normal action of the diaphragm, which is the chief muscle of respiration, is very important in singing.

Normal inhalation is impossible when the abdomen is forcefully expanded because the normal expansion of the chest is lost. Normal breathing is a combination of chest and abdominal action, and this combined action is necessary for the normal inflation of the lungs. Normal breath support for tone production demands an unrestricted flow of the breath to the larynx, and this can be obtained only through normal exhalation.

The forced expansion of the abdomen is generally used to control the breath pressure by creating tension of the body muscles. The forced expansion and controlled contracting of the abdomen are believed to produce a conscious governing of the action of the diaphragm, therefore enabling the singer to regulate the breath pressure in tone production. Because of this physical manipulation, normal breath support is lost; the voice fails to attain its normal development. The natural fullness and roundness of tone quality is destroyed, and the ends of phrases often sag from pitch.



Forced abdominal breathing

Tones become weak; and when the full volume of the voice is demanded in a forte passage, the singer must resort to a conscious lifting of the breath to obtain additional support. This lifting action often releases the tension of the abdominal muscles, and the quick rising of the diaphragm causes an unnatural pressure of the breath on the larynx. If this lifting action is consciously controlled, either it results in insufficient support or it may cause such an abnormal pressure that the breath is crowded into the upper part of the lungs. Insufficient support causes the tones to sound under pitch. The abnormal pressure results in tension of the laryngeal muscles, and the pitch is raised.

This form of breathing prevents the normal flow of breath to the larynx; the upper tones of intervals become thin and "hooty" in quality. The ascending tones of a scale passage gradually lose their roundness of tone quality and often pass into a falsetto. The action of the enunciating organs is weakened in tone formation, and the habit of scooping results.

Tension of the abdominal muscles and of the diaphragm prevents their normal action in exhalation, and the major portion of the air content is not available for tone production; sustained singing becomes difficult. Insufficient breath support causes constriction of the laryngeal muscles and their fatigue. To use the balance of the air content, the singer must consciously contract the abdomen, this action produces an exaggerated pressure upon the vocal cords. The strain of the pressure upon the vocal cords prevents normal functioning and produces irritation; mucous collects on their surfaces, and huskiness results.

Tension of the abdominal muscles prevents the normal use of the air content of the lungs, and the unnatural retaining of a large portion of the air in the lungs causes difficulty in inhalation. The singer, unable to use the major portion of the breath content naturally, experiences a sense of breathlessness, and the small inhalations of air that are necessary to replenish the breath supply cause fatigue of the chest and the laryngeal muscles.

## VI

## AUDIBLE INHALATION

Audible inhalation is caused by an inadequate opening of the throat to allow the free passage of air for quick inhalation. Singers who maintain a set position of the mouth and lower jaw, forcing the tongue to perform the major amount of action for enunciation, generally suffer from this annoyance. The loss of normal lip action results in tension of the throat muscles, and the opening of the throat becomes constricted. To correct this condition, the normal functioning of the enunciating organs must be cultivated by acquiring normal movements of the lower jaw.

The use of nasal or head focus of tones often causes audible inhalation. Focusing the tones toward the head cavities causes the tongue to assume a high position at the rear of the mouth cavity, and the throat fails to open for quick inhalation. Only the establishment of normal direction of the tones will remedy this difficulty.

Retaining the mouth formation of the final word or of the final consonant in a phrase prevents the necessary opening of the throat and mouth for the next inhalation; and, if not corrected, it results in a form of throat stiffness which prevents the correct enunciation of the opening word in the next phrase. The singer must release the enunciating organs for this formation in order that the throat may have an adequate opening for the free passage of air in inhalation.

If inhalation becomes laborious, as it does when the breathing muscles are underdeveloped, there results a tension of the breathing muscles which extends to the throat muscles and contracts the opening of the throat, and inhalation becomes audible. The normal strengthening of the breathing muscles through normal physical activity combined with good breathing exercises proves an efficient remedy, and is beneficial in acquiring good breath support.

Fear and nervousness often cause tension in the throat muscles, and the contraction of the normal opening of the throat results in audible inhalation. Singers who experience this difficulty will note that they do not experience it in their daily practice. The acquisition of poise and routine in public performance will act as a corrective.

Breathing exercises called "sipping the breath," the practice of inhaling the air through a small opening of the lips, results in tension of the throat muscles and contraction of the throat opening, and inhalation becomes audible. This method of breathing fatigues the breathing muscles because it prevents their normal spontaneous action for inhalation.

# VII

# THE VOICE IN INTERPRETATION

The cultivation of musicianship is often neglected by younger singers; only by experience can they appreciate the value of a musical background for artistic development. The student of singing should study the piano even to the point of becoming a proficient accompanist, for the ability to play a good accompaniment will prove valuable in the study of new repertoire.

Vocal technique does not constitute the entire equipment necessary to become an artist; it should be looked upon as the vehicle through which the artist expresses his interpretative ability. The singer's interpretation is the expression of the vision inspired by both the text and the music. If the singer has the ability to absorb the meaning of the words of a composition, he can inspire others with his singing. Singers seldom devote serious study to the text of a composition, to ascertain the inspiration that called forth its creation or its musical setting.

The study of a composition by repetition of the words in conjunction with the music does not enhance the freedom of expression. The ability to remember the words only in conjunction with the melody is disconcerting, and the singer's memory is unreliable. The finer meaning of the text and the beauty of the music are never realized. The singer should first carefully memorize the text of a composition, and allow a natural projection of it through reciting the poem aloud. Careful attention should be given to the phrasing of the words and to their dramatic import and to their imaginative appeal that the singer may give the true interpretation of the poem.

Singers who resort to the cultivation of emotional tone qualities, producing sounds of suppressed feeling, through the manipulation of the vocal organism, should note the loss of vitality in the voice. Not only does mechanical production of these tone qualities destroy the natural timbre of the voice, but the interpretative work of the singer becomes grotesque, and the exaggerated effects fail to arouse the admiration of an audience. The ear of the listener is quick to sense a lack of true emotion on the part of the singer; stereotyped tone qualities or unnatural emotion cannot long hold the attention. The same principle is applicable to the vocalist who tries to "thrill" the audience by the use of pretty tones; repetition dims the glamour, and the performance becomes mechanical.

Thought should be directed away from physical actions, and this can be accomplished only by acquiring a technique based on the natural functioning of the vocal organism. The singer cannot devote his attention to interpretation while his thought is occupied with the mechanical side of singing. Beauty of tone is not a product of physical manipulation, and conscious effort does not develop warmth of tone quality in the voice.

The cultivation of stereotyped qualities of tone to indicate certain moods limits the singer's ability to express himself. Vocal effects should never be incorporated in the technique of the singer, for the technique of every singer should be the vehicle for keeping the voice in perfect condition. Striving to acquire a breathy quality of tone for the expression of intense surprise and terror, a throaty or so-called chest quality to denote sorrow and remorse, a light reedy quality to express joy—these destroy the natural timbre which has been acquired through correct tone production.

Qualities of tone should be the outcome of emotions of the singer inspired by the text and music of a composition. These qualities will be the true expression of emotion to which those who listen cannot fail to respond. One need only analyze the performance of a successful singer, who may or may not have an exceptional voice. By the emotional appeal of his singing, he has gained many enthusiastic followers; the singer's sincerity of feeling is the result of being so inspired by his songs that they become a part of himself. He who pours forth his voice in tone qualities that are the true expression of thoughts within never fails to convey the meaning of his songs. His tone qualities are not the result of a conscious guiding of the voice through stereotyped tone formations; they are real qualities, the outcome of the artistic soul.

Facial expression should reflect the thoughts inspired by the text and the music. Avoid cultivating a conscious manipulation of the facial muscles, lest it impede the natural action of the lips in enunciation and create unnatural mannerisms. Facial manipulation produces tension in the facial muscles, and there is a loss of the free action of the lower jaw; this tension extends to the throat muscles and prevents the normal adjustments of the larynx in tone formation.

The singer should never fail to observe the importance of being natural; it is the basis of all artistic performance. He should create legitimate effects in his interpretation, effects which follow if his thought is imbued with the true meaning of the text and the music. However, being natural does not mean being careless in details. Carelessness in the enunciation of words and the distortion of the vowels result in the loss of the natural timbre. Consonants become weak and lacking in the necessary impetus to open the vowels directly; the singer suffers a loss of spontaneity and develops the obnoxious habit of scooping from one tone to another.

The instructor should always encourage the student's original ideas in interpretation. He should never destroy the student's confidence in his self-expression, but should avoid the development of fear and self-consciousness. Criticism of the student's interpretation is always best accomplished by suggesting better effects. Never tell him to imitate another singer lest this destroy his own creative ability. The singer must retain his individuality if he is to become an artist. His art should be the result of his own creation and expression; then, and then only, may an artist acquire his own individual place in the artistic world.

# VIII

# REBUILDING THE VOICE

A broken voice, in the majority of cases, can be restored regardless of age if the singer possesses good health and if the vocal organism is in a healthy condition.

*Singers suffer a deterioration of the voice when they no longer hear the natural timbre.* There are several causes, among them, incorrect methods and ideas of tone production, cultivation of facial mannerisms, stereotyped qualities of tone for interpretative work, incorrect use of the speaking voice, and incorrect classification of the voice.

Incorrect methods and strain of the vocal organism are generally the cause of the singer's loss of voice. There is little reason for the young singer not regaining his voice and pursuing a successful career if he is careful to select an instructor whose work is based upon natural principles. If the problem is the result of strain, the singer should rest for a short period and then continue his study under an instructor whose methods are based on normal ideas. This should restore the normal functioning of the vocal organism and the natural timbre of the voice.

Many successful singers lose their voices by acquiring unnatural habits in tone production through the cultivation of facial mannerisms for interpretative work. This invariably causes the loss of normal lip action and results in the distortion of the natural formation of the vowels. When the vowels are distorted, the singer is unable to hear the natural timbre of his voice, and he cannot know when his tones are correctly and normally produced.

The cultivation of stereotyped qualities of tone for the expression of certain moods is destructive to the voice and results in distortion of the vowels and of the natural timbre of the voice. If an unnatural action of the vocal organism is consciously used to produce these qualities of tone, throat stiffness generally results.

Incorrect use of the speaking voice often causes the deterioration of the voice. Singers, cultivating the habit of speaking on a very low pitch of tone, soon develop a throaty production which distorts the natural timbre of the voice. Because of the loss of normal lip action, low pitch of tone in the speaking voice causes a loss of normal enunciation. The soft palate and the rear of the tongue attempt to compensate for the loss of normal lip action, and throat stiffness results.

Incorrect classification is often the cause of the singer's loss of voice. High baritones are only too often considered tenors, and their voices are strained by singing literature in which the tessitura of the songs is too high. Many contraltos and mezzo sopranos are trained as sopranos, and their voices are forced beyond the natural limits of the compass. Singers who find their voices are failing would do well to give very careful attention to this phase of the problem. They should seek the advice of an instructor whose ear is capable of hearing the natural quality of their voice.

It is not always advisable or necessary to cease singing, except in extreme cases, and then only for a short period. When the voice is being rebuilt, the attention should be confined to the middle part of the compass, because the singer can more readily hear the natural timbre of the voice in this range. The ability to hear the natural timbre should be well established before any attempt is made to use the upper tones.

Successful rebuilding of the voice is never obtained through efforts to counteract unnatural action by producing an opposite effect. This method can result only in failure, because it does not establish the normal action of the vocal organism so that the singer may hear his natural timbre.

## IX

## THE BOY'S VOICE

Boys' voices should not be trained prior to the period of adolescence, and then not until the voice is definitely settled. One to two years are required for the voice to change. Many fine voices are permanently ruined by excessive use prior to changing; many more are ruined by singing during this period.

When the voice begins to change, the boy should use it sparingly until it becomes settled. Boys' voices seldom give any indication of their future quality or classification, and it is always well to wait until the voice has definitely settled before any attempt is made to establish its identity.

Many boys in boy choirs force their voices by singing too difficult anthems, and the strain upon the young throats results in a loss of many future voices. Teachers of music in schools should beware of sacrificing a voice "to make a showing." They should beware also of deliberately classifying voices incorrectly in order to fill a section of a chorus that is weak.

Good vocal habits which will play an important part in the future development of the voice come with training children early to speak correctly. Many of the vocal difficulties experienced by adults are the result of bad speech habits acquired during childhood. Children should be trained to speak vowels clearly and to enunciate consonants freely. Children should be allowed to sing only literature that does not tax the volume or compass of the voice.

## X

# THE GIRL'S VOICE

Girls' voices mature but do not go through a period of change like that of boys' voices. Girls' voices often fail to give any indication of their classification before the age of sixteen or seventeen. Young voices which give promise of being sopranos should be handled with care and should not be forced to sing difficult arias simply because they may have an unusual range. Instructors should remember that young vocal cords are extremely pliable and are easily forced beyond their natural limits.

The disagreeable tremolo sometimes heard in mature voices may be the direct result of strain of the vocal cords before maturity. That tremolo which is caused by strain of the vocal cords and laryngeal muscles is often difficult to correct and is liable to become a permanent difficulty.

Girls' voices should be carefully guarded against strain, or the quality of the voice will become harsh and breathy in quality. Girls' voices that are badly strained during childhood are often difficult to classify, and the instructor will be wise to delay his judgment of the voice until it has regained a normal condition.

Young voices should not be taxed with much sustained singing. Exercises requiring agility and lying well within the compass of the voice should be used in the first lessons.

# XI

# SINGING OFF KEY

Singing off key has various causes; the most frequent is the inability to hear the correct pitch. Students of singing often begin their studies with little or no musical knowledge; they have not learned to hear the various intervals. Piano study cannot be too strongly recommended as an important prerequisite for artistic singing; the ear training thus obtained will prove beneficial in correcting faulty intonation.

Singing off key, when a result of incorrect tone production, can be remedied only by a change of method of instruction. The singer may hear the correct pitch; but owing to the unnatural functioning of the vocal organism, he is unable to sing it. The instructor should never attempt to correct the error of singing off key by telling the student to think higher or lower pitch. Avoid impressing the difficulty upon the mind of the student, and he will more easily put aside the obstruction. Direct his thought to the cultivation of that correct vocal knowledge which will enable him to eliminate faulty intonation without his becoming obsessed by its presence.

The habit of forcing the voice is one of the most common causes of singing off key. Abnormal pressure upon the larynx, the result of incorrect breathing, often causes such acute tension in the laryngeal muscles that the pitch of the tones is raised. The singer may hear the correct pitch, and this mental concept should produce the normal amount of vibration of the vocal cords; but the abnormal breath pressure upon the larynx tenses the laryngeal muscles, and the vibration rate of the cords is increased, thus raising the pitch.

By using head focus of tones, normal adjustment of the opening into the head cavities by the soft palate is lost. This loss causes such an intensification of the upper vibrations that the tones acquire a shrill sharp quality and sound above the key. Head placement causes the tongue to rise at the rear of the mouth cavity and tenses the laryngeal muscles; this tension causes an increase of the vibrations of the vocal cords, and the pitch is raised.

Head placement prevents the normal action of the soft palate in its adjustment of the opening into the head cavities. Normal resonance is lost, and tones become dull and under pitch. Chest production of tones also causes singing under pitch. The habit of tensing the laryngeal muscles to produce the chest quality of tone prevents the normal adjustments of the larynx for the upper tones.

The habit of singing under pitch may result from insufficient breath support, because physical manipulation of the breathing muscles prevents the natural flow of breath in tone production. The retarding of the flow of the breath prevents the normal vibration of the vocal cords, and the tones sound under pitch.

Sliding or scooping from one tone to another prevents the normal formation of the vowels, and the lack of normal resonance causes the tones to sound under pitch. Tone formation or tone attack should always be direct, the vowel taking its instant formation with the sounding of the tone. A vowel formed prior to the attack not only produces *breathy tone quality* but also causes singing under pitch. Gradual tensing of the vocal cords is used in this form of attack and prevents their normal vibration; tones fail to attain the correct pitch.

The escape of small portions of the breath prior to the attack expends so much breath that there is insufficient support, and the ends of phrases sound under pitch. This is especially evident in vocal methods using *h* to produce an aspirated attack of the tones.

Fatigue of the throat muscles, caused by incorrect tone production or excessive use of the voice, often causes tones to sag from pitch. General fatigue of the body from strenuous exercise or heavy work will result in singing under pitch. If the singer has indulged in strenuous exercise or feels that the body is fatigued, he should rest before attempting to sing.

## XII

# CLASSIFICATION OF VOICES

Correct classification of the voice is of the utmost importance if success is to be achieved in singing. Voices generally classify themselves by their quality and compass; but should these factors prove doubtful, then the voice should be classified according to its tessitura. If the tessitura of the voice were more carefully considered there would be less danger of incorrect classification.

Many instructors have difficulty in classifying a voice because they are unable to hear the natural timbre. In such a case their diagnosis should be delayed until they have worked sufficiently with the voice to be sure of its classification.

The condition of a voice is often responsible for its incorrect classification. A student may have admired the quality of tone heard in another's voice and by imitating it may have so distorted his own natural quality that it is impossible to classify his voice until it has regained its normal condition. Many students do not accept the correct classification of their voices but continue to strive to acquire a compass and quality of voice higher or lower than their own, until their voices are strained and have lost their mellow quality.

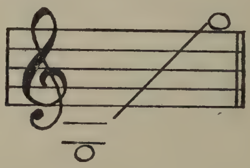
Young singers with unusually large compasses often persist in singing literature that is too high for them. A few numbers may be sung with apparent ease; but the freshness of the voice soon disappears as the vocal organism becomes fatigued, and the singer gradually loses the ability to hear the natural timbre of his voice.

Forcing to sing literature which lies too high often results in *breathy tone quality* or a hard metallic quality that at first sounds above the pitch. As the voice becomes fatigued the tones lose this hard brilliant quality and become dull and lifeless, sounding under the pitch.

Voices that have been badly strained by singing above the natural limits of the compass will recover their freshness if carefully handled, and the vocal organism will regain its normal condition. A voice that has been strained should be allowed to rest for a short period and then used only in the middle tones until the singer again learns to hear the natural timbre.

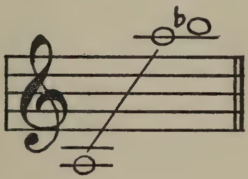
A voice may have the quality and compass of a higher range, yet the tessitura will be low; if this be the case, the voice will become strained by singing literature of the higher range. Mezzo contraltos and mezzo sopranos possessing a wide compass are often classified as dramatic sopranos. They are able to sing the soprano literature for a while but gradually they lose the upper tones of the compass, and the voice deteriorates in quality.

## THE CONTRALTO VOICE



The contralto voice possesses a deep rich quality with an exceptionally low range. The compass may not extend high, yet the tones of this voice should be full and rich, even in the upper tones. Instructors, unfortunately, often attempt to thin the quality of the tones in the upper part of the compass in order to give greater ease in singing the higher tones. Many instructors fail to develop flexibility in this type of voice because they believe its round full quality cannot be used in florid singing. This is a serious mistake, for all voices should be trained to sing even the most florid types of songs which lie within the natural limits of the compass. Great care should be exercised that the student with this type of voice does not cultivate a false heaviness or weight in the lower tones; this weight leads to a change of quality in the middle tones of the voice where a so-called "change of registers" develops. Contraltos having this type of voice should carefully acquire the ability to hear their natural timbre in both the upper and lower extremes of the compass.

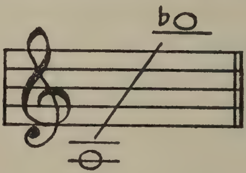
### The Mezzo Contralto



The mezzo contralto generally is a voice of much wider compass than the contralto. A voice of this type can often ascend to b flat and even high c of the dramatic soprano, yet its tessitura does not permit the singing of soprano literature. A singer possessing this type of voice should carefully abstain from singing literature which lies above the tessitura. A few high tones may be sung with great effectiveness; but excessive use of the upper tones fatigues the voice, and there is a loss of the mellow quality.

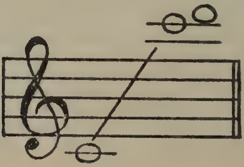
The unusual depth of quality in the low tones of the contralto is rarely heard in the mezzo contralto voice. A singer with a mezzo voice often attempts to amplify the volume in the lower tones by cultivating false weight which destroys the natural timbre and prevents the normal functioning of the vocal organism. The higher tones will gradually become thin and "hooty" in quality and in time will lead to a loss of tones in the upper part of the compass. Mezzo contraltos should always guard against the danger of imitating the quality in the upper tones of the dramatic soprano voice.

## THE MEZZO SOPRANO



The mezzo soprano has a tessitura higher than that of the mezzo contralto and a quality slightly deeper than that of a dramatic soprano. The mezzo soprano is rare, and she should exercise great care in selecting her literature. Many songs that lie within the compass of the soprano may be sung with ease. Much of the mezzo contralto literature which does not embrace too low a range, can be used by the mezzo soprano. The mezzo soprano should avoid cultivating unnatural heaviness of quality in the lower tones—chest tones—because these injure the vocal organism and destroy the natural timbre.

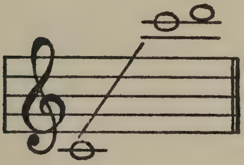
## THE DRAMATIC SOPRANO



The dramatic soprano voice has a full rich tone which lends itself ideally to the singing of dramatic literature.

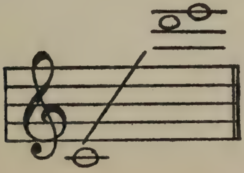
The volume varies as does the extent of its compass. Dramatic sopranos may sing even some of the coloratura literature if the greater part of it does not lie beyond the tessitura of the voice. Many of the lyric soprano roles in operas are suitable for the dramatic soprano; roles which lie within the limits of the tessitura and which are suitable in character for the voice.

### THE LYRIC SOPRANO



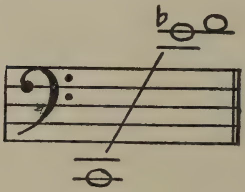
The lyric soprano differs from the dramatic soprano in that it is of lighter quality and of slightly higher tessitura. Its compass does not differ greatly from that of the dramatic soprano. Many lyric sopranos can sing some of the coloratura parts in the operas with great success. Here it must again be stressed that the tessitura of the literature must be observed carefully to avoid straining the voice.

### THE COLORATURA SOPRANO



The coloratura voice rarely possesses the volume of either the dramatic or lyric voices. The tessitura of this voice is very high so that it may perform many of the intricate figures of vocalization in the upper part of the voice. Because of the phenomenal upper extent of the compass, coloratura sopranos are apt to overwork the upper part of their voices. Many coloraturas resort to forcing to enlarge the volume, and the constant strain results in an early deterioration of the voice. Too often, singers possessing this type of voice are content to sing literature that embraces only the upper part of their compass. They fail to develop the lower and middle tones and are unable to sing much of the literature that would display the beauty of the middle voice. Sopranos of this type should develop the middle tones of their voice and use them. The listener soon tires of hearing a constant parade of high notes; he will appreciate them more if they are used somewhat sparingly. The singer should not overlook the wealth of literature in which the interpretative ability may be displayed with or without high notes. The normal use of the middle tones will aid in keeping the voice at its best and enable the singer to employ the upper tones when needed with greater beauty and ease.

## THE BASS VOICE

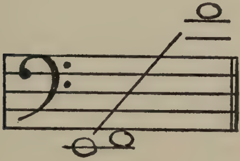


The bass voice is the deepest male voice. Its quality displays a heavy vibrant character, and its tessitura lies well within the middle tones or lower. The flexibility of this type of voice is very often neglected, and those who possess it often fail to cultivate the maximum agility for the florid literature that lies within the natural compass. One of the greatest mistakes made by many instructors is neglecting the use of sufficient florid exercises in the training of this kind of voice.

The bass, like the contralto, should avoid cultivating a false weight in the lower tones, because the development of the upper tones of the compass will be hampered. The unnatural gutteral quality eliminates the use of much of the literature and diminishes its value as a solo voice, because the upper tones acquire a "cupped in," "hooty" quality.

Occasional bass voices possess a phenomenal compass which permits the use of baritone literature in which the tessitura does not lie too high. The occasional use of the higher tones of this type of voice is admirable, but constantly to force the voice to sing literature that is too high fatigues the vocal organism and destroys the mellow quality.

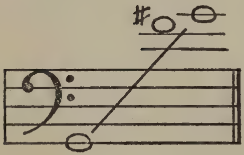
## The Bass Baritone

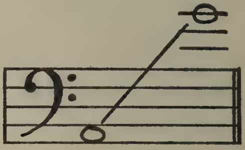


The bass-baritone, or basso cantante as many like to designate this voice, is higher than the bass. It often possesses extreme low tones which are not as heavy in quality as those of the bass voice. The bass-baritone has great possibilities as a soloist; the voice has, supposedly, more agility. Singers with this type of voice should not overwork the top voice but, employing the upper tones sparingly, should use songs well within their compass.

Bass-baritones should guard against cultivating an unnatural heaviness of quality in the lower tones and should avoid a "cupped in," "hooty" quality in the upper tones.

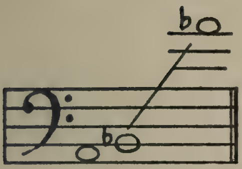
## The Baritone Voice



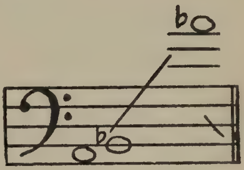


Baritone voices may be divided into two types. The first type has a slightly higher tessitura than the bass-baritone and can employ a limited number of high tones in the upper extremes of the compass. The second type is still higher in tessitura and can utilize some of the literature that lies within the compass of the higher baritone whose compass is similar. Both of these types are often forced beyond their natural limits; their mellow quality is lost, and a vibrato or tremolo is often acquired. The "hooty" quality, which is heard in many baritone voices of this type when singing extreme upper tones of the compass, proves injurious to the voice. Few singers who use this "hooty" quality are aware that they fatigue the muscles of the soft palate by unconsciously exerting an unnatural effort in sustaining these tones. Extensive use of this type of tone production results in such fatigue of the vocal organism that the voice will not respond for any tones above the middle part of the compass. The singer should rest the voice when experiencing this condition and should seek the correct method of tone production.

## The High Baritone



Robust



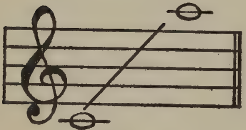
Lyric

The high baritone voice is of two types, the robust and the lyric; the latter has a decided tenor quality in the upper tones. The robust type of baritone is high, yet the baritone quality predominates in all the tones from the lowest to the highest notes of the compass. The tessitura of this voice is high; and the upper tones, if produced normally, are sung with ease. The lowest tones of the robust baritone or of the lyric baritone do not have the weight of the lower baritone voice, and care should be taken by singers possessing the robust or the lyric baritone that they do not force the lower tones or cultivate false weight—chest quality—which will cause the loss of the normal functioning of the vocal organism. If the gutteral quality resulting from chest tones is extended into the middle tones, the upper tones develop a "cupped in" or "hooty" quality.

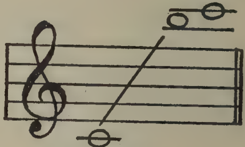
The definite quality of the robust type of baritone diminishes the danger of its being classified as a tenor voice. There are many instances in which this voice is considered a robust tenor and is forced up beyond the natural limits of the compass. By using a falsetto quality of tone in the upper part of the voice, tenor literature in which the tessitura does not lie high may be used.

The lyric baritone is too often classified as a tenor voice. The tenor quality in the upper tones is very misleading, and the instructor should delay his judgment of this type of voice until he has worked with it sufficiently to establish its identity. There are lyric baritone voices that can sing as high as b flat above middle c, yet the tessitura of the voice precludes its being classified as a tenor. The lyric baritone is not as heavy as the high robust type of baritone voice, but the tessitura is a little higher. Care should be taken that the lower tones of this voice are not forced.

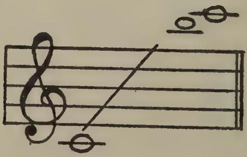
## TENOR VOICES



Second tenor



Robust tenor



Lyric tenor

Tenor voices can be listed under three classifications, second tenor, high robust tenor, and high lyric tenor. Many consider there are only two classifications and do not recognize the second tenor as an individual type of voice.

The second tenor voice is quite common, and yet it is the one most often abused in training. Few instructors will accept its limitations; they strive by tricks of vocalization to produce additional tones in the upper part of the compass. The "hooty" quality, often heard in the upper tones of this type of voice, is not pleasant to the ear; it produces a "cupped in" quality by which all vowels assume an *oo* sound. This "hooty" quality is heard to best advantage when the singer scoops upward an interval, usually a fifth, to the extreme top of the compass; this "cupped in" sound of *oo* preceded by an *h*. When descending from this high note, the *oo* sound prevails until the middle tones of the compass are approached when the open quality is forced to take on a blatant sound with a vibrato or tremolo. Many tenors, even those with the robust voice, follow this method of tone production. The throat stiffness that comes from this manner of singing causes voice deterioration whose first indication is a husky quality, particularly in the lower part of the compass.

The robust tenor voice—many call it the operatic tenor voice—has a high tessitura. This voice is rare and should be carefully handled to prevent forcing. The upper part of the compass extends to b flat or high c. The upper tones are very resonant and ringing in quality.

The lyric tenor is not as large a voice as the robust type and is considered more flexible. It is often of a very light character; the tones in the upper part of the compass resemble a falsetto in quality. The lyric tenor must guard against thinning out the tone quality in an effort to produce pianissimo tones, because he may acquire the habit of producing the upper tones in falsetto voice. He, also, must exercise care not to force the tones in the lower part of the compass.

## XIII

## HUMMING

Humming has little value in the development of the voice, other than its use in the establishment of the correct location for the point of focus or the natural direction of the tones.

There are various ways of humming; and the vibrations can be experienced at will (1) on the lips, (2) in the head cavities, (3) or in the throat. Humming with the vibrations on the lips directs the tones to their natural place of emission, the lips. This is the correct method of humming because it results in the natural forward direction of the tones. To hum with the vibrations centered toward the head cavities or the bone structure of the facial masque and head causes an unnatural adjustment of the rear of the mouth cavity. The tongue rises at the rear of the mouth and produces throat stiffness. To center the vibrations in the throat causes an excessive drawing down of the rear of the tongue, thus crowding the larynx into an unnaturally low position and resulting in throat stiffness.

Humming should be used in the middle tones of the compass only, because there is no opening in the mouth cavity to enable the production of tones in the upper or lower part of the compass. Humming does not increase the resonance of the voice, nor can the vibrations experienced in the various resonating mediums be intensified by its use. Head resonance cannot be amplified by nasal humming. The exaggerated vibrations felt in the head cavities and in the facial masque are maintained only as long as thought is directed toward these parts. The use of nasal humming stiffens the soft palate, and this tension causes a loss of the normal adjustment of the opening into the head cavities. The constant use of nasal humming will force the tongue into a high position at the rear of the mouth cavity; and when this becomes a habit, much of the resonance of the mouth cavity is lost. Constantly directing the thought toward the head cavities results in a loss of the natural direction of the tones toward their natural exit, the lips.

Correct humming is of value when it directs the singer's thought to the natural place of emission for the tones, the lips. Humming, when used in the middle tones of the compass with the vibrations upon the lips, will enable the vocal organism to adjust itself normally. The vibrations for correct humming can be located by enunciating the consonant *m* and by prolonging the vibrations felt upon the lips. There will be no consciousness of the throat nor of the head cavities, yet there will be a normal blending of the vibrations of the various resonating mediums. When this humming is correct, it will establish the correct location for the point of focus of the tones; and it will prove of value in directing them to their natural place of emission.

Singers often study new songs by humming the melody softly. They invariably use a throaty production of humming, but they are not immediately aware of the throat fatigue that results from its use. Many bad habits in tone production are acquired in this way, and its practice should be avoided.

## XIV

# VOWELS AND CONSONANTS

### VOWELS

The natural timbre of the voice can be acquired only through the normal action of the enunciating organs in the formation of the vowels, and this normal action can result only through the natural direction of the tones to the natural place of emission, the lips. The mental conception of the natural sound of the vowels will furnish the necessary impetus for the action of the lips and the tongue in their formation.

The flexibility of the voice is seriously affected by the unnatural action of the enunciating organs in the formation of a vowel. The conscious drawing of the lips and the tongue into a formation for a vowel prior to the attack of the tone not only distorts the sound of the vowel but destroys the agility of the voice in florid passages. The tension caused by conscious manipulation of the enunciating organs results in a loss of the normal adjustments of the larnyx, adjustments which produce natural separation of the tones.

The formation of a vowel prior to the attack of the initial note of a scale causes a distortion of the vowel in the ascending or descending tones. Consciously forming the vowel on the first note of a florid passage and the effort to maintain this same formation throughout the succeeding tones causes a loss of flexibility in the adjustment of the enunciating organs in the ascending and descending tones. The distortion of the vowels caused by this loss of flexibility results in the tones becoming either thin and strident or *breathy* in quality. The latter results in a loss of the breath support, and long florid passages are difficult.

Loss of the normal action of the enunciating organs through conscious manipulation causes tension at the base of the tongue and in the muscles of the soft palate. Because of this tension, the rear of the tongue fails to adjust itself for the normal opening of the throat, and the tones lose their natural quality or timbre. Loss of the normal throat opening, combined with a lack of normal adjustment of the opening into the head cavities by the soft palate, causes a sombre quality in the lower tones; this quality invariably changes to a "hooty" sound with the ascending tones. The vowel *o* and the sound *ah* are most seriously affected by this unnatural action.

The flexibility of the tongue is most important in its adjustment of the mouth cavity for the formation of vowels and for the enunciation of consonants. The action of the tongue is unconscious, and regulation of its movements produces tension in the muscles at the rear of the mouth cavity. This tension, which many call throat stiffness, results in distortion of the vowels. Many singers try to counteract the loss of the normal throat opening by holding the tongue flat in the mouth with the tip against the lower teeth. A careful examination of this tongue position shows its fallacy, for not only is the tongue seriously impeded in the enunciation of consonants but the mouth cavity is badly adjusted for the formation of vowels. This manipulation of the tongue causes the thick, closed tone quality which many call *covered tone*.

The natural forward formation of the vowels *e* and *o* has great value in producing the natural focus or direction of the tones. Because of the small mouth opening, these vowels should be combined with the more open sounds *ah* and *aw*. All the vowels should be used in voice development, because each vowel has its own intrinsic value in building a technical foundation. The use of any one vowel to the exclusion of the others prevents normal development of the enunciating organs and of their flexibility, and often results in throat stiffness.

Formations of the vowels are distorted by incorrect methods of tone production. Many instructors use a smiling formation, or spreading of the lips, to counteract the sombre or "covered" tone quality caused by unnatural direction of the tones. The spreading of the lips distorts the vowels *o, oo,* and the sound *ah,* and they lose their natural roundness of tone, becoming thin and reedy in quality. This hard reedy quality is accepted as brilliance of tone; the singer gradually suffers a deterioration of the voice because of his inability to hear the natural timbre. Loss of normal lip action in enunciation causes throat stiffness because the muscles of the soft palate attempt to compensate for the loss of round tone quality.

Some instructors advise the use of an "inner smile" for cultivating brightness of tone quality. They also advocate manipulation of the tongue in vowel formation. Careful analysis of the "inner smile" reveals tension in the muscles of the soft palate and a resultant nasal quality of tone. The "inner smile" prevents the natural formation of the vowels because of a loss of flexibility of the muscles of the mouth cavity and the rear of the tongue. Manipulation of the tongue in vowel formation prevents its natural spontaneous action, and vowels are distorted.

There are instructors who approve the cultivation of a modified sound of the vowels; but on careful analysis this procedure proves a serious hindrance to the normal formation of the vowels. The singer who practices the modified sound of the vowels loses the ability to hear the natural formation of the vowels, *e, a, i, o,* and the sound *ah.* Failure to hear the natural sounds of the vowels results in their distortion, and the singer is unable to hear the natural timbre of the voice. Hearing the natural timbre of the voice in the normal formation of the vowels is the foundation of the singer's technique and is the only means by which he can ascertain the efficacy of his daily practice. Difficulty in singing any certain vowel is generally due to the singer's not using that vowel in his daily practice. The singer should learn to hear the timbre of his voice in the natural formation of this vowel. By combining it with other vowels in his exercises, he will acquire a normal use of it.

## Consonants

Consonants open and close the vowels in the pronunciation of words. Consonant action must be quick and spontaneous, without any studied manipulation of the enunciating organs.

Tension in the throat muscles or throat stiffness, experienced by many singers, is often a direct result of weak enunciation of consonants. Consonants are generally weak because of incorrect focus of the tones or because of failure to project the words. Incorrect tone production causes a loss of the normal action of the enunciating organs, and they fail to function normally for the enunciation of the consonants. The singer's lack of attention to the text is often a result of his effort to manipulate the enunciating organs in the formation of tones; words become slurred one into another because the consonants lack the necessary impetus for the natural action of the lips and the tongue.

Singers using nasal or head placement generally experience difficulty in enunciating consonants that require lip action. When tones are focused toward the head cavities they are diverted away from their place of emission, the lips; and the consonants, *b, f, m, p, v, w,* all of which require lip action, are weak; clear enunciation becomes impossible.

Weak lip action in consonant enunciation causes throat fatigue. If consonants requiring lip action are of insufficient strength to produce the normal action of the lower jaw in enunciation, there is a loss of the normal opening of the mouth cavity. The rear of the tongue is then forced to lower itself unnaturally to produce the opening of the throat for tone formation, and the tension produced in the laryngeal muscles results in their fatigue. Several words occurring consecutively on a single tone in the upper or medium part of the compass are difficult to sing because of the loss of normal jaw action. The lack of normal opening of the mouth cavity does not allow sufficient room for the normal action of the tongue in enunciation. Soft singing is difficult because normal consonant enunciation is lost and vowels are distorted.

Nasal or head placement weakens the action of the tongue in the enunciation of the consonants, *c, d, g, j, k, l, n, q, r, s, t.* The high position which the tongue must assume at the rear of the mouth prevents its natural action in the enunciation of these consonants, and the throat fails to open sufficiently for normal tone production. The consonants, *c, g, k, q,* all of which require the action of the rear of the tongue, become weak and fail to cause the normal opening of the vowels that follow them.

The singer should observe his enunciation of words and should note the consonants that are lacking in strength. He should practice the enunciation of words embracing the use of these consonants in the speaking voice and should cultivate a free, spontaneous action of the lips and of the tongue. He must exercise care that no attempt is made to manipulate the enunciating organs, because unnatural emphasis of any consonant produces tension of the muscles and results in strident tone quality and in distortion of the vowel that follows.

The cultivation of facial mannerisms is detrimental to good consonant action because of the distortion of normal lip action. Spreading the lips as in smiling, causes a weakness of consonants and distorts the vowels that follow.

Weak consonants fail to open the vowels quickly and spontaneously, and small amounts of breath escape unused. This loss of breath is often attributed to a lack of breath control, and the attempt to correct it through a conscious manipulation of the breathing muscles is a mistake.

The consonants, *f, s, t, z,* cause a loss of breath if their action is not spontaneous and direct. A word commencing with one of these consonants will often cause the escape of a large amount of breath, and the balance of the phrase cannot be sung. The singer should take care that no exaggerated hissing sound is produced in the enunciation of the consonants, *f, s, z.* Incorrect enunciation of these consonants causes stiffness of the lower jaw. It is difficult to sustain tones in the upper part of the voice when words beginning with these consonants are not directly and spontaneously enunciated. Failure to enunciate these consonants directly results in *breathy tone quality.*

*H* is a source of difficulty for many singers. The aspiration used in its enunciation is the slight sound resembling a rapid click. The vowel that follows the *h* should be formed instantly with the attack.

# XV

# THE LIPS AND THE TONGUE

The natural timbre of the voice is attained only through the normal action of the enunciating organs, the lips and the tongue. The action of the enunciating organs is unstudied, and any conscious manipulation of their action to draw them into a formation for a vowel prior to the attack of a tone results in a loss not only of their own normal action but of the action of the entire vocal organism as well.

The singer who consciously manipulates the lips for enunciation will find that there is a tension in the muscles of the throat and that the timbre of the voice is distorted. The vowels, *e* and *o,* are most seriously affected by the manipulation of the lips; much of the resonance is lost when these vowels are formed prior to the attack. Not only are these vowels distorted, but words in which they occur become unintelligible.

Assuming that the creation of space between the upper lip and the teeth intensifies resonance, some systems of vocal instruction advocate protruding the lips; tension is caused in the soft palate and the loss of the normal adjustment of the opening into the head cavities results in an unnatural nasal quality which is accepted by many as resonance. The natural warmth or timbre of the voice is absent. Protruding the lips destroys normal lip action and distorts the vowels. Consonants requiring the action of the lips cannot be properly enunciated, and sufficient strength for clean enunciation of words is lacking. *Breathy tone quality results.*

Smiling, or spreading the lips, to produce brilliance of tone quality causes a loss of normal lip action in enunciation. The tension of the muscles at the corners of the mouth stiffens the lower jaw and prevents freedom of action for enunciation. The consonants, *b, f, m, p, v, w,* are weakened, and the vowels which they introduce become cupped in the roof of the mouth; thus they lose their natural delivery out of the mouth. The tone quality is thin and lacking in the natural timbre; the tones fail to "color" for the emotional expression of the singer. The stiffness felt in the lower jaw extends to the laryngeal muscles; there is a loss of the natural separation of the tones in a florid passage. The tension of the throat muscles combined with the stiffness of the lower jaw causes an unnatural acceleration of tempo, difficult to control in florid passages. Spreading the lips causes a loss of the normal action of the lower jaw, and the throat cannot open for the upper tones; the quality becomes thin and shrill.

Throat fatigue results from failure to use the lips in speaking and singing. The habit of speaking on a tone of low pitch is one cause of loss of lip action in word formation; enunciation then takes place at the rear of the mouth cavity by the action of the soft palate and of the rear of the tongue. Lack of normal lip action should be corrected, because the natural timbre of the voice cannot be cultivated if the lips do not function normally in enunciation.

Loss of normal lip action, seriously affects the action of the tongue. Spreading the lips prevents the normal action of the lower jaw, and the tongue lacks sufficient room to function for the enunciation of the consonants, *c, d, g. h, j, k, l, n, q, r, s, t;* the vowel that follows never attains its normal formation. Failure to enunciate these consonants properly often results in a hissing sound which denotes a loss of breath. The vowels acquire a breathy quality of tone, and the singer experiences a lack of breath support.

The tongue adjusts the mouth cavity for the formation of the various vowels and also functions for the enunciation of certain consonants. Its spontaneous freedom of action is important in the correct enunciation of words, and the utmost care must be taken that no attempt is made to control or regulate tongue movements. Vowels are distorted by throat stiffness which is produced by a conscious effort to control the movements of the tongue.

Consciousness of tongue action, which is a serious impediment to good singing, invariably leads to attempted manipulation of tongue movements. Enunciation becomes laborious, and throat fatigue results. Much of the difficulty experienced in the upper tones by singers results from effort to hold the tongue flat in the mouth. This forces the tongue backward in the mouth cavity and obstructs the normal opening of the throat. Holding the tongue flat in the mouth with the tip touching the lower teeth prevents its natural freedom of action. The tension at the rear of the tongue prevents normal action in vowel formation, and there results a blatant quality of tone. The consonants, *c, g, j, k, n, q, r, t,* fail to produce ample movement of the tongue, and word pronunciation is lacking in clearness. This is one of the causes of slurring and scooping from one tone to another.

# LESSON I

## Placement or Focus of Tones

The first principle to be established in the building of a technical foundation is the correct focus, or natural direction, of the tones to their place of emission, the lips. This is a vital point in attaining that which is necessary to enable the student to hear the natural timbre of his voice, the normal action of the vocal organism. This is also the fundamental point in the cultivation of a scale embracing one quality, the natural timbre, from the lowest to the highest tone in the compass.

The fundamental point in the first lesson is the training of the student's ear to hear the natural timbre of his own voice, when produced by the normal functioning of the vocal organism in vowel formation. To gain this normal functioning of the vocal organism, the tones must be focused to the point where they can be formed into words by the natural action of the enunciating organs, the lips and the tongue.

Each voice has its own individual timbre, and the student must acquire the ability to hear this timbre in the natural formation of the vowels in order that he may definitely establish a foundation for his technique. *He cannot be positive of the results of his practice if he cannot hear the natural timbre of his own voice.* Physical sensation cannot be relied upon for a definite index in tone production; the physical sensations that are experienced by one singer vary from those experienced by another, because of the difference in the physical formation of each singer. Therefore, the singer cannot imitate the quality or timbre, duplicate the action of the vocal organism, nor reproduce the exact physical sensation of another singer without destroying the normal functioning of his own vocal organism and of his own natural timbre.

The natural timbre of any voice can be acquired only by the natural direction of the tones to the place of emission, the lips. The timbre is the result of the natural blending of vibrations in the several resonating mediums; a blending which, if attempted consciously, destroys this timbre. The normal action of the vocal organism must be attained before this timbre of the voice can be heard.

*A tone is either right or wrong.* It is never light or dark in color. To consider tones in terms of colors is very misleading and invariably causes the student consciously to attempt the manipulation of the vocal organism. Only normal action can produce correct tone formation, and the student *should never consciously attempt to mold a tone after the attack has been made*, as this causes muscular tension. A tone must assume its natural quality or timbre with the attack, and all muscular adjustments must take place naturally and instantly with the attack.

The first step in gaining the sense of normal direction of tones is to understand the relation between tone and vowel formation. The ear of the singer must be trained to hear the normal formation of the vowels in the speaking voice by acquiring the spontaneous action of the enunciating organs, the lips and the tongue. As the singer acquires the normal direction of the tones toward the place of emission, the lips, the action of the enunciating organs becomes natural.

Correct tone production in singing is normal vowel formation; this gives the natural timbre of the voice. This statement may seem rather peculiar to some; but upon careful analysis, this fact will become clear to all. The vowel is the open sound of the word; and in training the voice, one must center the attention upon the normal formation of the vowel. Normal tone formation is hearing the natural timbre in the correct vowel formation and being positive of what is heard. The vowels—*e* as in *meet, a* as in *father, i* as in *kite, o* as in *slow, oo* as in *moon*—are the fundamental sounds upon which the development of the voice should be based.

The long sounds of the vowels—*e, o, oo*—are considered closed vowels. *A* as in *fate* is a little more open in sound. *A* as in *father* is the open sound and should be used in combination with the others as it forms one of the most valuable means of acquiring the normal opening of the tones. *I* is a combination of *ah* and *e;* and because the open sound *ah* is used in its formation, it may be classed as an open vowel. *U* is a combination of *e* and *oo*. The student should never lose sight of the important fact that each of these vowels requires an individual natural action of the enunciating organs in its formation.

The natural action of the enunciating organs is acquired only through the establishment of normal direction of tones to the natural place of emission, the lips. The normal exit of tones is through the mouth. The normal functioning of the lips and the mouth cavity in vowel-sound formation may be obtained only when the tones are focused or directed to their natural place of emission, the lips. In directing the tones to the place of emission, caution should be taken that the singer does not attempt to force the tones forward to the front of the mouth nor to hold the tones forward by setting the formation of the lips or mouth cavity for the vowel after the tone attack. The thought of tones going straight ahead out from the mouth combined with the mental conception of the natural sound of the vowels establishes normal tone direction with perfect ease.

Each vowel requires an individual formation of the mouth cavity and of the lips. The mouth cavity is adjusted by the action of the tongue; and that no effort be made consciously to manipulate the tongue for the formation of any vowel is of vital importance. The impetus for this formation can arise only from the correct mental conception of the sound of each vowel. The singer should practice speaking the vowels, allowing each to take its formation at the instant of attack.

*M* is the consonant most forwardly enunciated; it establishes a natural focus of the tones by a natural adjustment of the vocal organism prior to the opening of the mouth for the vowel sound. The natural enunciation of "em" in the speaking voice and the prolonging of the vibrations felt upon the lips while closed establish the natural point of focus for the tones. The vibrations will concentrate upon the lips. The next step is to utilize this vibration in correct humming. The vibrating sensation of the lips will instantly cause the tones to focus toward the front of the mouth or place of emission, the lips. Care should be taken that no muscular tension is experienced in the muscles of any part of the vocal organism in humming. There should be absolute freedom of the muscles of the throat, because any tension in the throat muscles will prevent the throat from assuming instantly its natural opening for the tone.

When the vibrations of the lips are felt, a quick opening is made into the vowel sound *ah*. The result will be "m-m-m-m-mah" with the vibrations of the consonant *m* prolonged. The opening of the mouth for the vowel should be quick and clean with no premeditated formation of the throat or enunciating organs. Only the free and spontaneous enunciation of the vowel without any distortion of its sound can produce the natural action of the vocal organism.

A word in regard to relaxation will be timely. Relaxation is freedom from tension. But for the singer relaxation requires tonality, i.e., a state of muscle firmness, alertness without tension. Many consider that that state in which the muscles are devoid of tonality or firmness is the relaxation necessary for singing. This is a serious mistake and one which causes many vocal difficulties. No singer can be relaxed in the sense that there is a lack of muscular tonality, because a muscle cannot function when it is relaxed. Therefore, if the mind is directed to a relaxation of a muscle or a set of muscles, there is at once a loss of the normal action of these muscles in tone production and of their co-operative action with other parts of the vocal organism. Muscles fail to develop when not used; then when demands are made upon them for tone production, tension results; and they lose their normal spontaneity of action. Normal action strengthens any muscle so that it may be relied upon to function properly.

Freedom from muscular tension in singing is erroneously believed to be acquired by concentrating the attention upon the limpness of the muscles. Muscular tension is always relieved without necessary guiding mental exertion, when physical action is normal. *Consciousness of physical action is one of the fundamental causes of physical tension.*

The singer should avoid any tendency to compress the lips in humming as this causes tension in the throat muscles as well as in the muscles of the face and the lower jaw. Much of the difficulty experienced by singers in acquiring the normal action of the lower jaw results directly from tension of the lips and their surrounding muscles. Throat contraction is, in a great many cases, a result of rigidity in the lip muscles, and is one cause of the loss of a natural opening of the throat needed for good tone production.

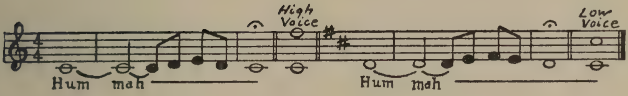
Attention should not be concentrated upon the tongue. The tongue will always adjust itself for each vowel when the attack is normal, and any consciousness of its action or effort to manipulate its movement destroys its natural action in adjusting the mouth cavity. In this lesson the singer should stress the normal production of the vowel sound *ah* which requires that the mouth be opened suddenly not gradually. If the opening from the humming into the open sound of *ah* is made instantaneously, there will be no consciousness of physical action in any part of the vocal organism especially while the tone is being sustained. The ear of the singer will find that the tone is free from any disagreeable quality, and that the normal resonance of the tone is instantly established without any consciousness or need of physical manipulation.

The natural opening of the throat follows normal action of the enunciating organs. The tongue adjusts the opening at the rear of the mouth cavity and regulates the opening of the throat for tone production. When vowel formation is natural, the rear of the mouth cavity and the throat assume their normal opening. Many singers endeavor to acquire an "open throat" by consciously lowering the rear of the tongue. This not only causes throat stiffness but produces a distortion of the natural mouth formation for the vowels. The tension of the muscles at the base of the tongue prevents normal tongue action in the enunciation of consonants.

The exercise for this lesson should be used only in the middle notes of the compass, and its value lies only in establishing the normal direction of tones and in enabling the singer to hear the natural timbre of the voice. Exercises for further development in the fundamentals of vocal technique are given in succeeding lessons.

## LESSON I

### EXERCISE



### *Rules*

1. Speak the consonant *m;* retain the vibrating sensation of the lips. There should be no consciousness of tension in the muscles of the lips and throat. Note the vibrations in the facial masque and chest, but note also that the principal vibration is of the lips; this is the correct point of focus for the tones. Speak the consonant *m* a number of times, until there is absolute freedom from any consciousness of throat action.

2. Speak the vowel *a* as in father. Repeat a number of times, until a normal spontaneous enunciation of the vowel is acquired without any conscious manipulation of the lips or throat muscles.

3. Speaking the consonant *m* and retaining the vibration of the lips for a moment, open the mouth instantly into the vowel *a*. The effect will be "m-m-m-m-mah." The vowel sound *ah* will be projected normally from the lips and will be correctly focused.

4. Now hum with the same vibrating sensation of the lips, observing the notes in Rule 1. Open quickly into the sound *ah*. The singing will be produced with ease. The normal resonance of the voice will be retained without any conscious effort to localize the thought on any part of the vocal anatomy.

# LESSON II

## Tone Development

This lesson is a further development of the natural focus or direction of the tones, and the use of the vowels will enable the student to apply the principles learned in the first lesson. As in the first lesson, the correct enunciation of the vowel in the speaking voice will prove the most valuable means of acquiring the natural formation of the vowel and of eliminating consciousness of physical action in its formation. When the singer hears the normal enunciation of the vowels in his speaking voice and can reproduce the same natural action in his singing voice without consciousness of physical action, he has established a definite foundation upon which he can build his vocal technique.

The student should pronounce separately the vowels *e, o,* and *a* as in *father,* in the speaking voice. The lips should be closed before enunciating each vowel to allow the lips and the tongue to assume their natural repose prior to the speaking of the vowel. This will prevent any premeditated formation of the vowel and will allow free spontaneous action of the enunciating organs for the attack. The mental conception of the clear natural sound of the vowel should furnish the impetus for the action of the enunciating organs in its formation. The vowel should assume its natural formation instantly with the attack, for only in this way can the lips and the tongue perform without effort their natural action in enunciation. Pronouncing the consonant *m* before several of the vowels (me-mo-ma) will aid in gaining a freedom of the enunciating organs in the formation of the vowels.

When singing the vowels *e* and *o,* they should be combined with the sound *ah* (ee—ah) (oh—ah), as indicated in the exercise for the lesson. The passing from the vowel *e* or *o* to the sound *ah* should be accomplished quickly and without any interruption of the flow of tone; thus, the *ah* assumes its formation instantly with the sounding of the second note. Slurring the vowel *e* into the sound *ah* will always cause a distortion both in the action of the enunciating organs and in the *ah* sound. To slur one vowel into another invariably causes tension at the base of the tongue, prevents the normal opening of the throat, hinders the normal formation of the mouth cavity for the vowel, and tenses the muscles about the mouth. The last prevents the normal action of the lips in the formation of the second vowel. Consciousness of physical action prevents spontaneous freedom of the enunciating organs in vowel formation, distorts the natural timbre of the voice, and results in the loss of normal direction or focus of tones to their place of emission, the lips. This exercise is of value only in the middle tones of the compass; it helps to direct the tones to their natural place of emission and aids the singer in hearing the natural timbre of his voice in normal vowel formation.

The vowel *e* is often a source of difficulty for many singers, usually due to an effort to focus this vowel toward the head cavities. To form this vowel, the tongue rises at the rear of the mouth. The effort to focus this vowel toward the head cavities exaggerates this rising action and closes the opening from the pharynx into the mouth cavity. The vowel is then impossible of production or weak in volume, and forcing will invariably result. Many endeavor to hold the tongue flat in the mouth while singing the vowel *e.* This causes tension in the throat muscles and also the distortion of the natural vowel sound.

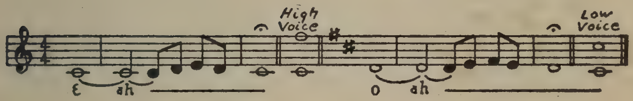
*E* and *o* have the greatest value of all the vowels in directing the tones to the front of the mouth. Because they are the most forward in formation, they prove a definite aid in focusing the singer's thought to the front of the mouth. Opening the mouth on the vowels *e* and *o* by a slight dropping of the lower jaw gives greater ease in the production of these vowels on the upper tones of the compass. This opening must never be excessive, because it distorts the vowels. Believing that it enhances the resonance of the voice, singers often use a smiling formation of the mouth when singing these vowels. But spreading of the lips destroys the natural formation of any vowel and causes the loss of the natural timbre. The vowel *o* requires a natural rounding action of the lips; if this is lost, a compensating action results in tension of the soft palate and causes throat fatigue.

Conscious formation of the vowel *o* results in the distortion of the vowel sound. The drawing of the lips into a formation for this vowel, prior to the attack always produces tension in the muscles of the mouth and throat.

*Ah* is the most open of all the vowel sounds; it has the greatest value in producing the normal opening of the throat. The spontaneous freedom of the enunciating organs in its formation cannot be too strongly stressed. The freedom of tongue action in adjusting the mouth cavity is a vital necessity, and the singer should avoid any conscious effort to manipulate the action of the tongue in the formation of this vowel. Conscious manipulation of the enunciating organs for the formation of the vowel sound *ah* causes an acute change in the vowel sound particularly when the vowel sound is sung on ascending notes. The smiling formation of the mouth is one cause of the change in voice timbre or quality, a change often heard in coloratura voices when they pass from the lower to the higher part of the compass. Conscious manipulation of any part of the vocal organism in vowel formation destroys normal resonance by preventing the natural blending of vibrations of the various resonating mediums.

## LESSON II

### EXERCISE



*Rules*

1. Speak the vowel *e*. Care should be taken that the voice does not assume too low a pitch as this will cause a throaty quality of tone, and the singer becomes conscious of throat action in the speaking voice. The lips and the tongue must have perfect freedom without conscious manipulation of their action. Do not attempt to draw them into a formation for the vowel because distortion of the vowel formation results in a loss of the natural timbre of the speaking voice. Speak the vowel *ah,* as in Rule 2, Lesson 1. Speak the vowel *e,* and open directly into the vowel *ah.*

2. Speak the vowel *o*. Care should be taken in speaking this vowel that there is no conscious manipulation of the lips to produce the rounded quality of this vowel. The vowel should be enunciated quickly and without any premeditated formation of the lips. The mental conception of the correct sound of the vowels must furnish the impetus for their formation.

3. Speak the vowel *o* and follow it with the vowel *ah*. Care should be taken that the formation of the vowel *o* is not carried over into the vowel *ah*. Clean enunciation is one of the fundamental points in the cultivation of the correct focus of the tones.

4. Sing the vowel *e*. The formation of the vowel must be simultaneous with the attack of the tone. The above rules should be applied to the singing of all the vowels. Direct formation of the vowels cannot be too strongly emphasized; it is one of the important points in preventing their distortion.

5. Now follow the vowel *e* with the vowel *ah,* opening directly into the vowel *ah*. There should be no consciousness of physical action, and the tone should be free and resonant.

6. Sing the vowel *o,* exercising the care given in Rule 2 for the speaking voice. It should always be remembered that the singing voice and the speaking voice are the same and are produced in the same manner. Follow the vowel *o* with, and opening directly into, the vowel *ah,* allowing the mouth to assume its natural formation.

7. Both exercises 1 and 2 are to focus the tones or to gain a normal sense of the direction of tones. Practice should be confined to the middle tones of the compass.

## LESSON III

### ATTACK

The attack of the tone is the starting of the vibrations of the vocal cords by the breath pressure. The number of vibrations required for the production of any tone or sound and the breath pressure necessary to start and maintain them are regulated by the mental conception of their pitch.

Many instructors falsely believe that tone attack in singing is the way the breath strikes the vocal cords; numerous theories have been advanced to control or regulate the breath pressure for starting the tone.

Correct attack in singing is the instant formation of the vowel at the moment the tone is sounded. Every tone makes its own individual demand upon the breath supply which is automatically determined by the formation of the vowel. The impetus required for the formation of the vowel and the regulation of the breath pressure for its production result only from the correct mental conception of its sound. To acquire this correct mental conception, the ear of the singer must be attuned to hear the natural timbre of the voice in the normal formation of the vowels when produced by a normal spontaneous action of the enunciating organs.

The difficulty which many experience in tone attack arises from the effort consciously to manipulate the vocal organism in tone formation. Failing to hear the natural timbre of their own voices because of the unnatural formation of the vowels, many singers attempt to acquire the timbre heard in another's voice by imitating their physical actions in tone production. The normal spontaneous action of the enunciating organs is lost, and they are drawn into formations for the vowels prior to the attack; the singer becomes conscious of his breathing and exerts physical effort to control the breath pressure in tone formation.

Vowels formed prior to the attack require an aspirated attack not unlike that of blowing. Those who use this system of tone production often advocate preceding the vowels with the consonant *h* which, supposedly, causes the correct action of the breath upon the vocal cords. The clicking sound that accompanies this method of attack is called the stroke of the glottis; it is very injurious to the vocal cords and irritates the membranes covering their surfaces. (See references to the use of *h*, page 77).

The formation of the vowel sounds is produced by the action of the enunciating organs, the lips and the tongue. The throat is not an enunciator, but is a channel for the tones to pass to the enunciating organs. There should be no conscious formation of the throat nor any regulation of its action in singing. The normal opening of the throat and its freedom from contraction in tone formation depend upon the singer's freedom from throat consciousness.

In singing the action of the enunciating organs in the formation of vowels is identical with their action for speaking. The enunciating organs should be allowed to act spontaneously, because any effort on the part of the singer to manipulate their movements results in vowel distortion. The lips should never be drawn into a formation for the vowels prior to the attack, because tension is produced in the enunciating organs and also in the throat muscles.

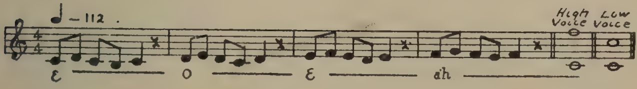
Throat stiffness is often a result of tongue stiffness. The rear of the tongue regulates the opening of the throat; its flexibility must not be destroyed by conscious control of its movements. The freedom of the throat to assume its normal opening for correct attack depends upon the freedom of the tongue instantly and spontaneously to adjust the mouth cavity for the formation of the vowels and to perform its action in the enunciation of consonants.

Free action of the lower jaw in opening the mouth is very important in this exercise. Tension of the muscles of the lower jaw prevents natural co-operative action with the tongue in enunciation, and vowels become distorted. This distortion of the vowels causes difficulty in singing the upper and lower tones of the compass. Those who habitually hold the jaw in a rigid position should practice the enunciation of the vowels in the speaking voice. They should release the tension in the muscles and cultivate a spontaneous action of the enunciating organs, carefully observing that the lower jaw performs its functioning in opening the mouth for vowel formation.

## LESSON III

## ATTACK

### Exercise



*Rules*

1. Allow the lips to close and the entire mouth cavity to assume its normal repose.

2. Without anticipating the action of the enunciating organs, speak the vowel *e*. The action of the enunciating organs in its formation should be spontaneous, and

the vowel should be formed instantly with the attack of the tone.

3. Following the same rules, practise the vowel *o*. Care should be taken that this vowel is formed with the attack, not before; anticipation of the mouth formation causes the difficulties that are experienced by many in singing this vowel.

4. In singing this exercise, the same precautions should be taken as are given in Rules 2 and 3. The tempo of this exercise may seem rather fast, but it will prove effectual in gaining the spontaneous action of the enunciating organs in the formation of the vowels.

5. Close the lips between each group. The closing of the lips releases the enunciating organs from the formation of the preceding vowel that they may instantly assume the formation of the succeeding vowel. Distortion of the succeeding vowel is prevented, as is any tension in the muscles of the enunciating organs. A slight breath may be taken between each group.

# LESSON IV

## Flexibility in Florid Singing

Florid exercises, such as scales, arpeggios, and scale combinations, are essential in the building of a singer's technique. They enable the singer to hear the natural timbre of the voice throughout the compass; they aid in establishing a singer's confidence in the use of the upper tones; they enable the singer also to use an even volume from the lowest to the highest tones of the compass.

Singers often fail to place sufficient stress on muscular flexibility in florid singing, and the difficulties many experience are usually the result of tension in the laryngeal muscles. This tension may result from incorrect focus of tones, from conscious manipulation of the enunciating organs in vowel formation, from holding the lower jaw in a rigid position, or from a conscious separation of the tones in a florid passage by combining a slow tempo with a stressing of each individual note. The latter is one of the most common faults; those singers who have been trained to use registers are most often guilty. Singers who have low voices in which there is a great deal of heavy throaty quality consciously separate the tones of a florid passage in this manner.

Flexibility is greatly impeded in the work of those singers who use methods of instruction which embrace the use of registers. A tension of the throat muscles, which results from the conscious holding of the larynx in a low position, prevents normal adjustments for tone production. Every tone requires its own individual adjustment of the larynx, and this laryngeal action produces the natural separation of the tones. The tension of the laryngeal muscles, not the heavy gutteral quality of tone produced through this muscular manipulation, is the cause of the loss of flexibility. Singers whose method of tone production embraces the use of registers can seldom sing a florid passage at a fast tempo without slurring the tones. The larynx, when held in this low position, can function only for a limited number of tones. Therefore, a scale extending from the so-called "chest register" into the "medium register" cannot be sung without unnatural manipulation to prevent the "breaking" of the voice when passing from the lower to the medium part of the compass. The difficulty is not because of the "break" or "change of registers," but because the laryngeal tension becomes so intense that the larynx cannot adjust itself for the ascending tones.

The normal action of the enunciating organs in the formation of the vowels is essential in the cultivation of the agility of the voice. Drawing the enunciating organs into a formation for a vowel or word prior to the attack of the first note of a florid passage causes tension in the laryngeal muscles. This tension results not only in an unnatural acceleration of the tempo but also in a slurring of the tones. The muscular tension of the enunciating organs destroys their flexibility, the vowel becomes distorted in the ascending or descending tones, and the timbre of the voice changes when proceeding from one extreme of the compass to another. The ascending tones become thin and strident, or they assume a "cupped in" quality which becomes "hooty" in the upper tones. The tension of the enunciating organs, particularly the tongue, causes a loss of the normal action of the lower jaw and prevents the natural opening of the throat for the upper tones; the singer is unable to sing an even scale embracing one quality from the lowest to the highest tones in the compass.

Singers often endeavor to increase the resonance of the ascending tones of a scale or florid passage by attempting consciously to intensify the action of the enunciating organs in the formation of the vowel. The tension caused in the muscles of the lower jaw and the throat results in a stoppage or "breaking" of the voice —which is really a closing of the throat—on the upper tones. The natural richness and roundness of tone quality are lost, and the voice becomes hard and metallic and accompanied by a loss of flexibility.

The habit of thinking that tones are high causes a sense of reaching which results in tension of both the throat and body. Tension of the throat muscles and of the lower jaw prevents the normal throat opening for the upper tones; and although the lower tones of a scale may have a round quality, the upper tones will assume a "hooty" sound. The tension of the body muscles prevents normal inhalation of air, and the breath supply is inadequate for singing the upper tones of the compass.

Focusing the tones toward the upper cavities of the head causes a loss of the roundness of tone quality, and the voice becomes thin and strident in the ascending tones of the scale. A careful analysis of the normal production of the upper tones reveals that they are no higher in placement than those of the middle and lower parts of the compass, and that the natural exit of all the tones is through the mouth. Therefore, if the singer mentally directs all tones of a scale or florid passage straight ahead of him to some object on a level with or lower than the eyes, the voice acquires an even quality of tone throughout the compass. Raising the eyes or looking up when singing the ascending tones of a scale always produces the sensation of reaching for the upper tones. This tension contracts the throat and thins the "body" of the voice in the ascending tones.

Methods of breathing have a vital effect upon the agility of the voice. Tension of the body muscles and of the vocal organism results from chest breathing —the forced expansion of the chest; it often extends to the laryngeal muscles and causes an unnatural acceleration of tempo which to control is difficult and often impossible. The crowding of the breath into the upper part of the chest causes an unnatural upward pressure upon the throat, and the tension of the laryngeal muscles prevents the natural adjustments for the production of the lower tones.

The student should hear the natural separation of the tones in a florid passage. This is best accomplished by playing the scale or florid passage on the piano along with the voice until the student's confidence in the agility of the voice is established. After the student has learned to hear the natural separation of the tones and has acquired an even tone quality throughout the compass in scales and florid passages, the exercise should be sung to some form of accompaniment.

Varying the sequence of vowels in the exercises aids in developing flexibility of the enunciating organs and in acquiring agility of the voice. It also enables the singer to hear the natural timbre of the voice in the vowel sounds in all parts of the compass. Many singers believe that only certain vowel sounds can be used in the upper part of the compass. The cause lies in not using all the vowels in vocalizing. The singer who vocalizes using only one vowel sound in the upper tones invariably attempts to reproduce that same physical sensation in all the vowels. The vowels are distorted, and the throat becomes stiff and fatigued.

The gradual dropping of the lower jaw, or opening of the mouth, when singing the ascending tones of a scale or florid passage, allows the throat to assume its natural opening for the upper tones. This prevents throat stiffness and aids in maintaining an even quality of tone throughout the compass. The singer should never allow this dropping of the jaw to become excessive; it distorts the vowel.

The natural roundness or fullness of tone quality in the upper tones of the compass should never be lost in florid singing. Many believe that the tone quality should be "thinned" or lightened" when singing florid passages in order to acquire agility. Avoid thinning the quality; it causes conscious physical manipulation and results in a thin reedy timbre which, contrary to the opinion of many, does not enhance the flexibility of the voice. "Thinning" causes a loss of the natural forward direction of the tones and results in throat stiffness. Habitual soft singing of scales often leads to the use of falsetto tones in the upper part of the compass, and forcing is required to produce volume in the upper tones.

### EXERCISE FOR FLEXIBILITY

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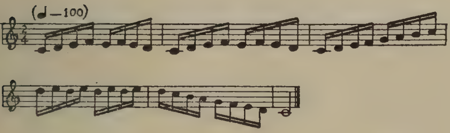

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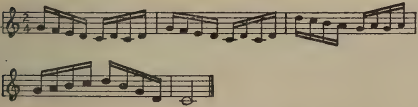

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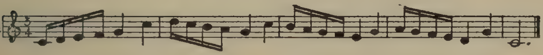

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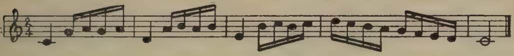

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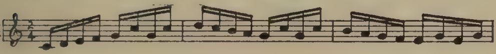

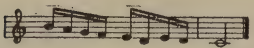

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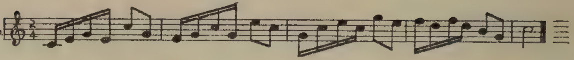

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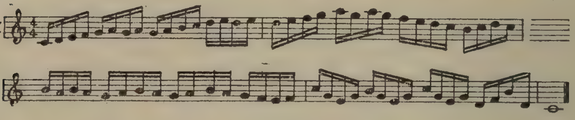

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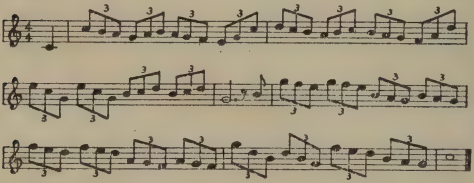

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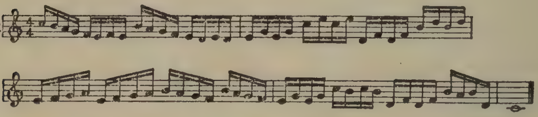

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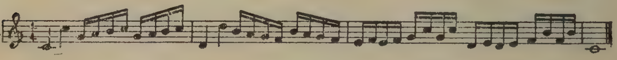

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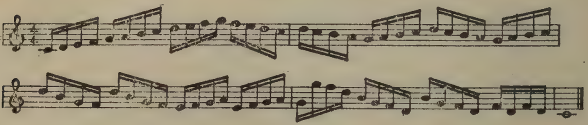


# LESSON V

## INTERVALS

The effort to carry from a lower to a higher tone the same mouth formation of a vowel results in the slurring of intervals. Normal action of the enunciating organs in the formation of the vowel is lost so that the vowel is distorted on the higher tone. The singer will also note a sense of lifting weight which is caused by an unconscious "lifting of the breath" to maintain an unbroken flow of tone. The "lifting of the breath" puts an unnatural pressure upon the throat and a resulting tension on the laryngeal muscles; the higher tone is likely to sound above or below the key. This tension frequently becomes so acute that the throat completely closes causing a stoppage or "breaking" of the tone.

When singing octaves, the singer should never think high when attacking the upper tone but should mentally direct the tone straight ahead on the same level with the mouth. If the higher tone is thought of as being on a higher plane, it lacks roundness of tone quality. Tension is felt at the rear of the mouth, and the tongue cannot adjust the mouth cavity for the continued natural formation of the vowel. The higher tone assumes a "cupped in" or "covered" quality which many singers endeavor to correct by spreading the lips as in smiling; this smiling produces a blatant quality, and the tone often rises in pitch. Spreading the lips temporarily thins the quality and permits the production of the higher tone, but the quality eventually becomes thick because of the tension of the muscles at the rear of the mouth cavity.

To acquire a clean skip of an octave, or of any other interval, retaining the natural formation of the vowel on the higher tone, the singer should mentally re-enunciate the vowel with the higher tone. This furnishes a natural impetus for the action of the enunciating organs in the formation of the vowel on the higher tone, eliminates the habit of scooping, and frees from tension the throat muscles which can now form the natural opening for the higher tone. The higher tone should always be mentally directed in a straight line before the singer to eliminate the sense of lifting. In this way the upper tone obtains its natural resonance and carrying quality.

In staccato singing of octaves, both the lower and higher tones should be thought of as individual attacks of the tones or individual successive formations of the same vowel on the two tones. Forming the vowel with the attack of each tone eliminates the unnatural clicking sound, often heard in methods advocating a stroke of the glottis for attack. Tension of the throat muscles which often occurs in staccato singing will be avoided. Care should be taken not to force, or raise, the breath upward with the attack of the higher tone; otherwise there is a strain upon the vocal cords and a production of husky tone quality.

Many instructors advocate preceding the higher tone with the consonant *h* in staccato singing. This aspirated attack causes an unnatural lifting of the breath, and the higher tone is apt to acquire a thick "covered quality."

# LESSON VI

## The Crescendo and Diminuendo

The difficulties that many singers experience in soft singing are the result of their inability to hear the natural timbre in their soft tones. They produce tones normally and hear the natural timbre when using the natural or full volume; but by manipulating the vocal organism for soft singing, they distort the natural action of the vocal organism and fail to acquire legitimate soft tones. Many believe that soft singing requires an entirely different method of tone production than does loud singing. By conscious physical manipulation, they acquire stereotyped tone qualities foreign to their natural timbre or quality.

Correct soft tones are normal tones of the voice when produced without power. Normal soft singing is produced neither by conscious manipulation of the vocal organism nor by conscious regulation of the breath pressure. The singer sings loud or soft tones at will, and the physical organism regulates itself naturally in soft singing as well as in speaking for the variation of volume. Therefore, soft tones (pianissimo tones) are produced in the same manner as are loud tones.

Soft tones should not be attempted in the first lessons because the singer does not yet hear the natural timbre, and there is danger of singing falsetto tones. The student should develop his voice at its normal volume; only in this way will he learn to hear the natural timbre throughout the compass. If the singer uses soft tones in acquiring a technical foundation, he consciously holds back the normal volume of the voice and prevents the natural flow of the tones to their natural place of emission, the lips. There results throat stiffness. The throat cannot assume its normal opening for tone production. Soft singing is then difficult in the upper tones because of tension in the throat muscles, and the tones are likely to stop or "break."

Conscious regulation of the breath pressure for soft singing results in insufficient breath support and causes tension of the throat muscles and of the enunciating organs. Vowels are distorted, and consonant action becomes weak; spontaneous action of the enunciating organs in the formation of words is lost. The habit of slurring develops. The loss of clean enunciation results in *breathy tone quality* which causes a lack of sufficient breath support for sustained singing. If the singer is not cautious, he acquires a habit of using falsetto tones for soft singing in the upper part of the compass. Attempts to increase the volume irritate the vocal cords, and huskiness results. Continued attempts destroy the singer's ability to produce upper tones with the normal volume of the voice. He can no longer hear the natural timbre of his voice, nor ascertain if he is singing correctly. The tension of the laryngeal muscles prevents the natural separation of the tones in florid singing.

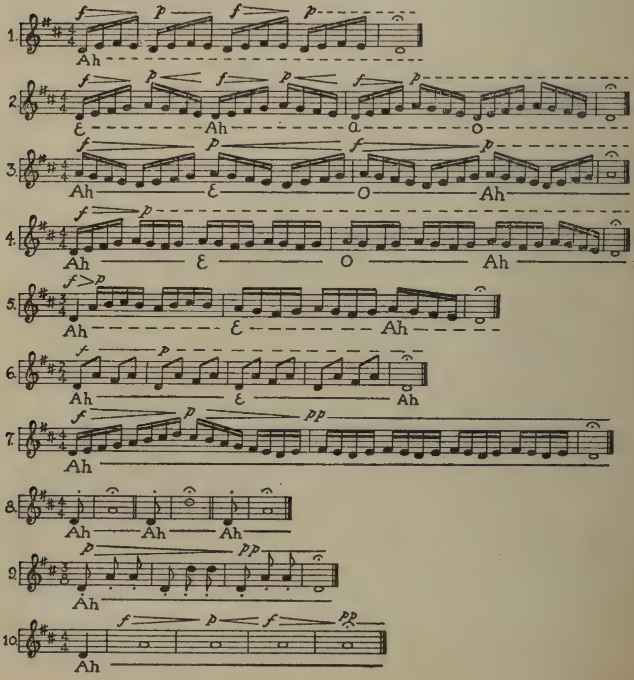
Unnatural pianissimo singing and its extensive use cause the unnatural relaxation of the muscles of the vocal organism and results in a loss of their normal development. Then the singer must resort to forcing when the full volume of the voice is used; tension results, the muscles become fatigued and gradually weakened, and tones sound tremulous. The lack of normal development also causes difficulty in maintaining the correct pitch. When the voice is fresh, the forcing causes the pitch to rise; when the muscles become fatigued, they relax, and the pitch is lowered.

Singers who use soft tones produced by physical manipulation use physical effort to hold the tones in place by consciously drawing the enunciating organs into a formation for the words prior to the attack. This habit results in scooping or slurring and causes tension of the muscles of the vocal organism, a tension which causes tremolo. The singer experiences difficulty in clearly separating the tones of a scale and in maintaining a definite interval when singing a trill.

Pianissimo tones are the normal or legitimate tones of the voice produced without power. They must have the same natural timbre of voice as full volume tones and a natural flow of the breath for their support. When the legitimate soft tones of the voice have been acquired, the singer may increase or diminish the volume of the voice at will. Nature regulates the amount of breath pressure needed for increasing or diminishing the volume; and if the tones are produced normally, the singer may increase or diminish the volume without conscious physical manipulation. Tones produced naturally assume their natural "colors" or qualities and volume, and the singer need devote his thought only to his interpretation. Singers who are unable to hear the normal soft tones of their voices—it is assumed they have acquired a normal use of the voice—should first cultivate the diminuendo. Diminishing the tone from the normal or full volume to a soft tone enables the singer to hear the natural timbre throughout the diminuendo and eliminates the danger of acquiring tone qualities foreign to the natural voice. Also the danger of using falsetto tones is eliminated because the singer can hear the legitimate voice throughout the diminuendo. Careful practice of the diminuendo will eliminate tension in the throat muscles when singing soft tones, and the singer will acquire the ability to hear the natural formation of the vowels in soft singing. Words are enunciated naturally, and the tones retain their normal resonance. When soft tones are normal and when words are clearly enunciated, direction of the tones toward the place of emission will always be assured.

The crescendo should not be attempted until the singer has acquired the ability to hear the legitimate soft tones of the voice. When soft tones are legitimate (not falsetto), the volume of the voice can be increased naturally without forcing; there will be no strain upon the vocal organism. The singer will hear the natural timbre at all times and will experience a natural freedom of the vocal organism in tone production whether the tones are loud or soft.

## Exercise for the Development of Pianissimo Singing



# LESSON VII

## THE TRILL

The trill consists of an even alternation of two distinct tones, the interval between them being either a whole or a half step. A careful observation of a few simple rules combined with slow practise will prove effective in acquiring the separation of the two tones and maintaining a perfect interval.

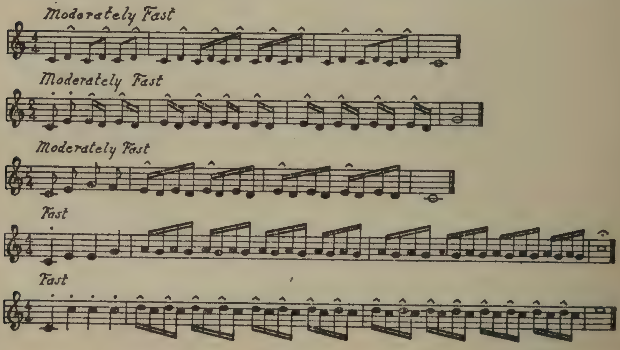
The beauty and brilliance of the trill result from the development of the definite interval, and this can be established only by *accenting the upper note.* Accenting the upper note is the fundamental point in the development of the trill, and it can be accomplished with greater ease by first using the interval of a whole step. This interval is more readily established than the half step, and the danger of the trill becoming a tremolo or vibrato is less imminent. The interval of the half step should be practised with the utmost care to prevent its becoming a shake or vibrato.

The trill should be practised with the aid of the piano until hearing the interval is well established and the tempo well developed. The accompaniment by the piano will aid in maintaining a rhythmic smoothness and an even alternation of the two tones. To increase the speed of the alternation of the tones before adequate preparation results in tension of the muscles surrounding the larynx and causes a vibrato or tremolo that is difficult to maintain on key.

The vibrato is generally accepted as a legitimate trill; and though at times it may seem to be composed of two distinct tones, its use should be avoided. The vibrato which is a shaking of the larynx, is produced by tensing the muscles of the lower jaw or those of the throat. Tensing these muscles to produce and to maintain this vibrato or tremolo easily becomes a habit and is destructive to the voice, because the larynx is unable to adjust itself for the individual tones of a florid passage. The rapidity of the vibrato varies with the amount of tension of the muscles surrounding the larynx. The greater the tension, the faster the vibration and the less definite the slight interval. To produce a rhythmic accent in this vibrato there must be a jarring of the tone by some conscious movement of the head or lower jaw. Since the vibrato has no definite interval, the singer who is accustomed to its use cannot sing at will trills having an interval of a whole or half step.

The beauty of the trill depends largely upon the quality or timbre of the voice. Nasal or reedy quality, most generally the result of head placement, will often develop into a shrill vibrato. Throaty or "covered quality" causes a coarse slow vibrato which is very displeasing. The placement or focus of the tones has a most vital bearing upon the cultivation of pleasing quality or timbre in the trill as well as in the cultivation of the flexibility of the voice.

## EXERCISE FOR THE DEVELOPMENT OF THE TRILL



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